Preproofer

Digital Information

Preproofer 770/790/970/990

Installation Manual

Digital Information Ltd.
Technoparkstrasse 1
CH-8005 Zürich

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Owning to our policy of continuous product development, specifications, terms and description of Preproofer 940/980 are subject to change without prior notice.

.

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Table of contents

1 Introduction 1-1

2 Safety 2-1
2.1 Warning 2-1

3 Pre Installation Tasks 3-2
3.1 Tools Required for the Installation 3-2
3.2 PC Specification 3-2
3.3 Materials Required for Installation 3-2
3.4 Unpacking 3-3

4 Frame Setup 4-1
4.1 Overview 4-1
4.2 Frame Parts 4-2

5 Assembly 5-1
5.1 Frame Sides 5-1
5.1.1 Additional Parts 5-1
5.1.2 Mount the Base Plate for the Wheels 5-2
5.1.3 Mount the Pillar and Distance Profile 5-3
5.2 Mount Bracket to Frame Sides 5-5
5.2.1 Additional Parts 5-5
5.2.2 Mount the Brackets 5-6
5.3 Mount Cross Member Top 5-10
5.4 Cross Beams 5-10
5.4.1 Additional Parts 5-10
5.4.2 Mount the Cross Beam for TOP Printer 5-11
5.4.3 Mount the Cross Beam for BOTTOM Printer 5-12
5.4.4 Mount the Stabilization Cross Beams 5-13
5.4.5 Tighten the Stabilization Cross Beams 5-15
5.4.6 Position the Cross Beam for BACK Printer 5-16
5.4.7 Position the Cross Beam for FRONT Printer 5-17
5.5 Brackets for Fixing the Printer to the Frame 5-19
5.5.1 Additional Parts 5-19
5.5.2 Mount Brackets to Profile 5-20
5.6 Mount the Cable Channel 5-21
5.6.1 Additional Parts 5-21
5.7 Add the Wheels 5-22
5.7.1 Additional Parts 5-22

5.7.2 Mount the Wheels 5-23

6 Prepare the BACK Printer 6-1
6.1 Remove the Paper Roll Cover 6-1
6.1.1 Roll Cover Assembly 6-1
6.2 Optional: Remove the Paper Roll Back Cover 6-2
6.2.1 Take off the Screws 6-2
6.3 Remove the Roll Adapter Holder and Guide 6-2
6.3.1 Take off the Guide 6-2
6.3.2 Take of the Roll Paper Adapter 6-3
6.4 Mount the Base Profile for Paper Guide / Camera holder 6-3
6.4.1 Additional Parts 6-3
6.4.2 Mount the Profile 6-4
6.4.3 Optional: Take off the Black Side Cover 6-5
6.5 Set the Wires 6-5
6.5.1 Additional Parts 6-5
6.5.2 Open PCB Cover on the Epson Printer 6-7
6.5.3 Cable from Electronic Box 6-7
6.6 CUT MOTOR Setup 6-8
6.6.1 Remove the CUT Motor Cable 6-8
6.7 PAPER FEED Motor Setup 6-9
6.7.1 Take Off the Paper Feed Motor Cable 6-9
6.8 CUT MOTOR ENCODER Setup - Electronic Box - HW Release 2 6-11
6.9 Take Off the End Switch and Encoder Cable 6-11
6.9.1 Take Off and Reconnect the End Switch and Encoder Cable 6-11
6.10 Wire the Control Panel Back Printer 6-13
6.10.1 Remove the Control Panel 6-13
6.10.2 Solder the Wires to the Panel 6-13
6.10.3 Guide the Cable to the Electronic Box 6-15

7 Prepare the FRONT Printer 7-1
7.1 Wire the Control Panel Front Printer 7-1
7.1.1 Take off the Control Panel 7-1
7.1.2 Solder the Wires to the Panel 7-1
7.1.3 Guide the Cable to the Electronic Box 7-3

8 Set the Printers into the Stand 8-1
8.1.1 Additional Parts 8-1
8.2 Back Printer 8-2
8.3 Front Printer 8-4

9 Paper Guide / Camera System 9-1
9.1 Side parts - Step 1 9-1

9.1.1 Parts used 9-1
9.1.2 Assembly 9-2
9.2 Side Parts - Camera Holder BACK Printer 9-3
9.2.1 Parts used 9-3
9.2.2 Assembly 9-4
9.3 Assembly „Right Holder“ and „Camera holder“ 9-5
9.3.1 Parts used 9-5
9.3.2 Assembly 9-5
9.4 Assembly Camera Holder Front Printer 9-6
9.4.1 Parts used 9-6
9.4.2 Assembly 9-7
9.5 Mount Side Holder Parts to BACK printer 9-7
9.5.1 Additional parts 9-7
9.5.2 Mount the side holders to Profile 9-8
9.6 Paper Guide Tubes 9-9
9.6.1 Additional parts 9-9
9.6.2 Mount Paper Guide Tubes 9-10
9.7 Tube Stopper 9-11
9.7.1 Additional parts 9-11
9.7.2 Mount tube stopper 9-12
9.8 Add Slot Nuts to Profile Front Printer 9-12
9.8.1 Additional Parts 9-12
9.8.2 Mount to Profile 9-13
9.9 Add Paper Guide and Paper Tension Parts 9-14
9.9.1 Additional Parts 9-14
9.9.2 Mount Paper Guide Tube Front Printer 9-15
9.9.3 Mount the Paper Tension Guide 9-16
9.10 Camera and Bar Light on Back Printer 9-17
9.10.1 Additional Parts 9-17
9.10.2 Mount Camera and LED Bar Light 9-19
9.11 Camera and Bar Light on Front Printer 9-19
9.11.1 Additional Parts 9-19
9.11.2 Mount LED Bar Light to holder 9-20
9.11.3 Mount the holder to Front printer 9-20
9.11.4 Mount the Camera 9-21
9.12 Paper Bow for Back Printer 9-21
9.12.1 Additional Parts 9-21
9.12.2 Assembly 9-22
9.12.3 Assembly to the Profile 9-23
9.13 Paper Bow for Front Printer 9-23
9.13.1 Additional Parts 9-23
9.14 Mount the Electronic Box 9-25

9.15 Align the Printers 9-25
9.15.1 Paper Path 9-25
9.15.2 Parallel Alignment Front Printer 9-27
9.15.3 Parallel Alignment Back Printer 9-30
9.15.4 Horizontal Alignment 9-31

10 Printer Panel Configuration 10-32
10.1 Parameter Setup TOP and BOTTOM printer 10-32
10.1.1 TOP Printer - Configure Custom Paper 1 10-33
10.1.2 Bottom Printer- Configure Custom Paper 1 10-37

11 LED Bar Light 11-1
11.1 Power Supply Setup for LED Bar Light 11-1

12 Setup Electronic Box – HW Revision 2 – Nov 2011 12-3
12.1 HW Changes 12-3
12.2 Power Supply Setup for Electronic Box 12-3
12.3 Setup the Lantronix Device 12-4
12.4 Run the Test Program 12-4
12.5 Calibrate the CUT Motor Parameter 12-6
12.5.1 Calibration – Step by Step 12-6
12.5.2 Setup Motor Speed 12-9

13 Setup Electronic Box – HW Revision 1 – OLD STYLE 13-10
13.1 Power Supply Setup for Electronic Box 13-10
13.2 Setup the Lantronix Device 13-11
13.3 Run the Test Program 13-11
13.4 Setup the CUT parameters 13-12

14 Test Printer Panel Cable Connection 14-1
14.1 Test „Paper Down BACK“ 14-1
14.2 Test „Pause BACK“ 14-1
14.3 Test „Pause FRONT“ 14-2
14.4 Test Paper MOVE 14-2

15 Calibrate Paper Movement Printer Back 15-1
15.1 Background 15-1
15.2 Paper Traction Calibration 15-1

1 Introduction

The Preproofer x900 is a fully automatic system printing double-sided imposition proofs. The system is based on two Epson Stylus 9700/9900/9890 printing engines printing 43” wide.

The Preproofer x700 is a fully automatic system printing double-sided proofs. The system is based on two Epson Stylus 7700/7900/7890 printing engines printing 23 wide”.

Please note:

Installation of this equipment must be done by a trained technician.

Do NOT leave Epson Printers on the stand without securing them with the Printer locking devices.

2 Safety

This section provides important safety information and must be read before switching on or operating the equipment.

2.1 Warning

All precautions mentioned in this document must be strictly observed at all times. Personnel MUST therefore read the contents of the document BEFORE commencing any work on the equipment described in the document.

Improper use of controls and switches, failure to comply with warnings, and the performance of adjustments or procedures not specified in this document may expose personnel to danger.

Installation of this equipment must be done by a trained technician.

Do NOT leave Epson Printers on the stand without securing them with the Printer locking devices.

3 Pre Installation Tasks

3.1 Tools Required for the Installation

- Standard screw driver set
- Allen key set
- Phillips screw driver set
- Measurement tape
- Cordless drill to unpack the boxes

3.2 PC Specification

- CPU Intel Core 2 Quad, 2.x GHz (high performance CPU is recommended
- min. 2 GB RAM
- min. 1x 250 GB hard disk drive, 7200rpm
- 1x 64 GB Solid State Drive
- min. 4x USB ports
- 2x Ethernet ports
- 19” TFT monitor (touch screen is recommended)
- Windows XP or Windows 7, 32 bit version

The PC needs to be equipped with a SSD Drive (min 64GB). The SSD drive is used because it’s astonishing write performance on small files as DI-Pilot does it when communicating between the two Epson printers, electronic box and the cameras system.

3.3 Materials Required for Installation

For the setup, prepare the following cables / hubs which are not part of the shipment:

- 4x RJ45 Ethernet Cable. Length: 2m, 2m, 3m, 5m
- 1x Ethernet Switch 10/100/100 min. 4 Ports

- 2x shielded USB 2.0 cable, USB-mini B to USB-A,
  used for camera connection, min 2 meters, goes to USB Hub
- 1x shielded USB 2.0 cable, USB-A to USB-B,
  used for connecting the USB HUB with the PC
- 1x active USB Hub (runs with a Power Supply),
  connects to the two USB cameras and the PC
- 1x Power Outlet Strip with minimum 6 outlets
  used for 2x Printers, 2x DC Power Supply (Camera and Electronic Box),
  1x USB Hub, 1x Ethernet Switch

3.4 Unpacking

Make sure all parts are available after unpacking the cases. Check the part list inside the shipment.

All packaged items must be inspected at the customer's site before unpacking begins. The following steps are taken when there has been damage:

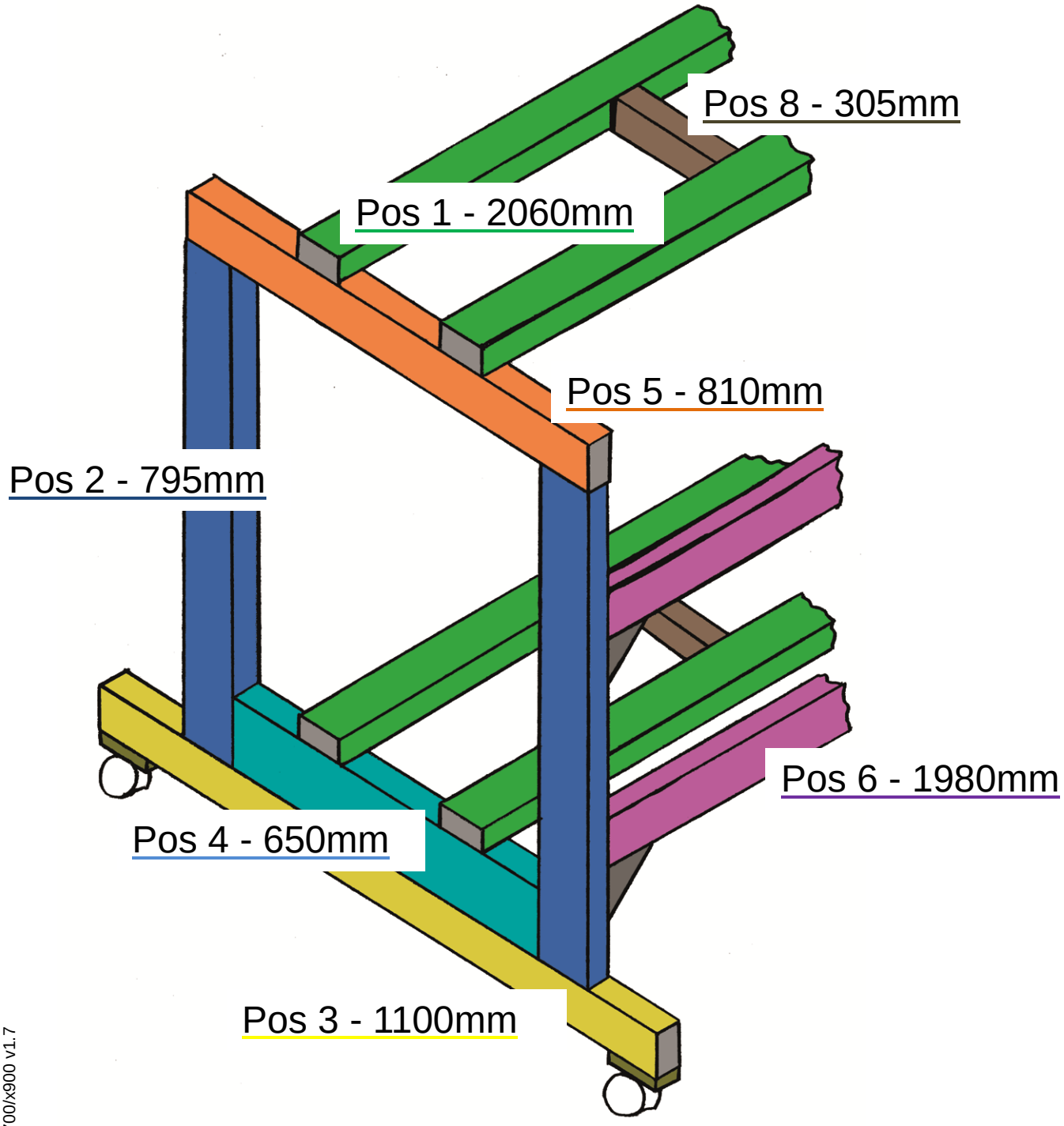
1.) Record the observations on the delivery documentation.

2.) Inform the carrier, shipping agent and insurance agent.

Units may be removed from their box only by an approved engineer or representative. Do not proceed with unpacking when there has been a damage report until authorized by the shipping and insurance agents.

4 Frame Setup

4.1 Overview



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4.2 Frame Parts

Pos	Amount	Color	Name	Profile in mm	Length in mm
1	4		Cross-member for printer top / bottom	40 x 80	2060
2	4		Pillar	40 x 80	795
3	2		Cross-member, 2 wheels mounted	40 x 80	1100
4	2		Cross-member bottom, distance holder for lower printer	40 x 120	650
5	2		Cross-member top	40 x 80	810
6	2		Cross-member for frame stabilization	40 x 80	1980
7	4		Distance holder for cross-member, position 1. Also used to fix printer to stand with bracket, position 27	40 x 40	305
8	4		Bracket for stabilization cross-member		
9	4		Base plate for swivel caster	40 x 80	
10	4		Swivel caster, 75mm		

5 Assembly

5.1 Frame Sides

5.1.1 Additional Parts

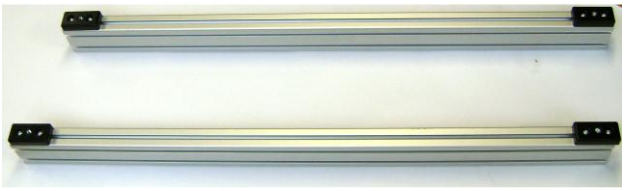
Locate the following parts:

Pos	Amount	Name	Dimension in mm
23	4	Base plate for swivel caster	40 x 80
25	8	Allen screw with rounded head, Fixes base plate to profile	M8 x 20
26	8	Slot nut	M8

5.1.2 Mount the Base Plate for the Wheels

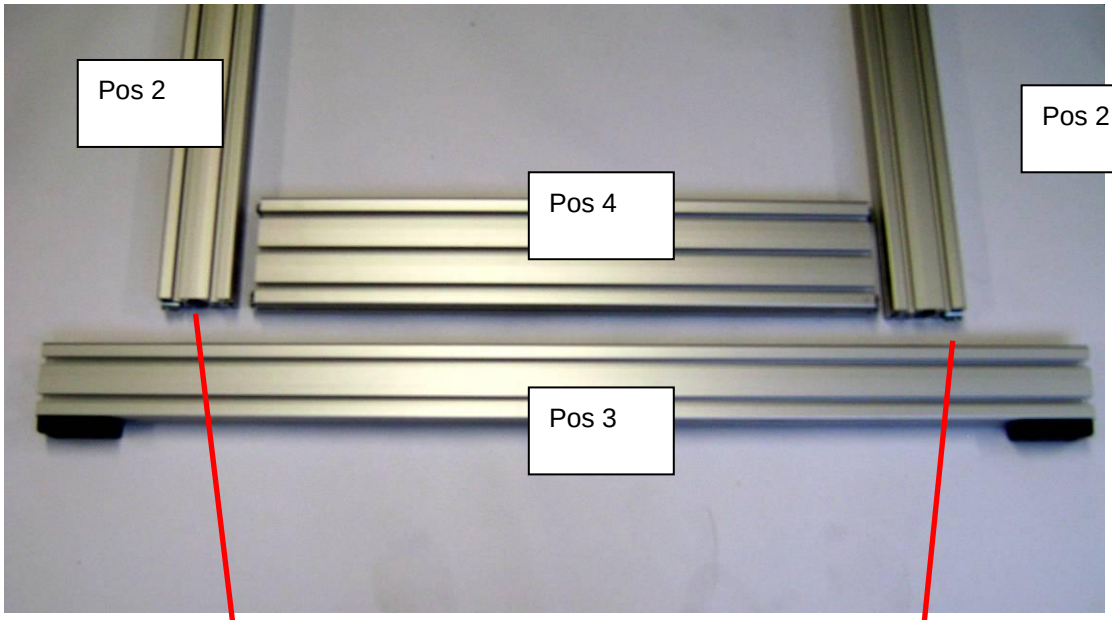
Mount on each side on profile (Pos 3, yellow colored, 1100 mm) the base plates for the wheels.

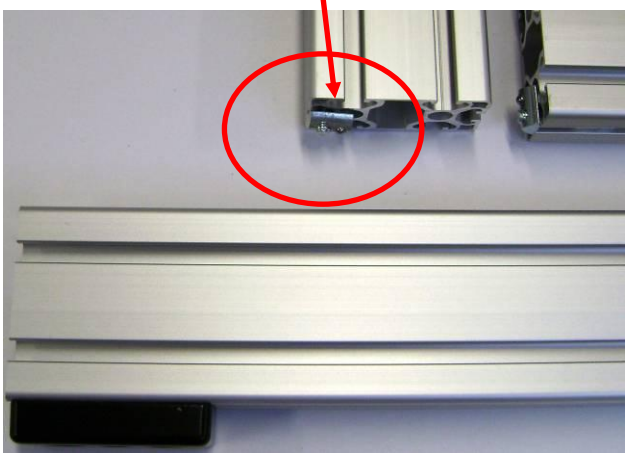
Tighten them strong.

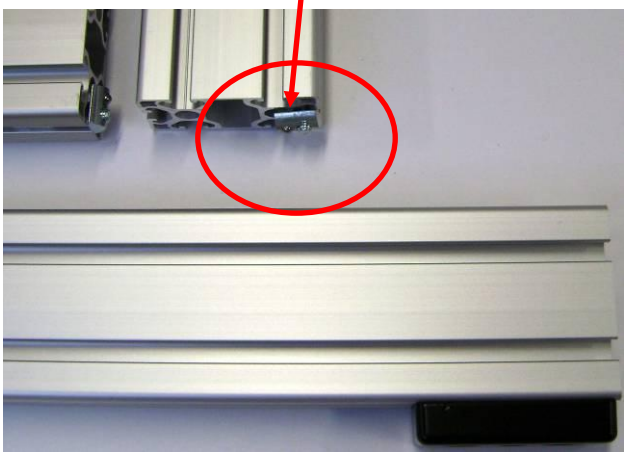


5.1.3 Mount the Pillar and Distance Profile

Take for each side the two pillar profiles (Pos 2, blue colored, 795 mm) and the distance holder profile for lower printer (Pos 4, blue colored, 650 mm, 160 mm height).







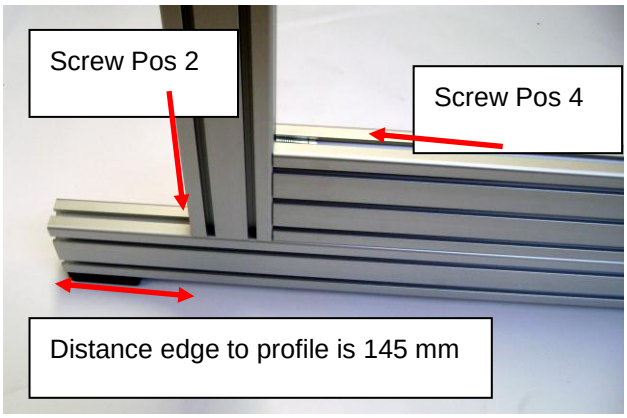
Take care to mount the pillars correctly. The screw is on the outer side.

Mount first the profile Pos. 4 to the two pillars Pos. 2.

Don't tighten too much as the profile Pos 4 should be still sliding.

Frame look after mounting the pillars.

Now slide in the Profile Pos 3. The distance from edge to the pillar is 145 mm.



FIRST tighten the screws from profile Pos 2.

SECOND tighten the screws from profile Pos 4.

Important:
The profile Pos 4 lies PRECISLY FLAT on top of profile Pos 3 to ensure a correct alignment to printer top.

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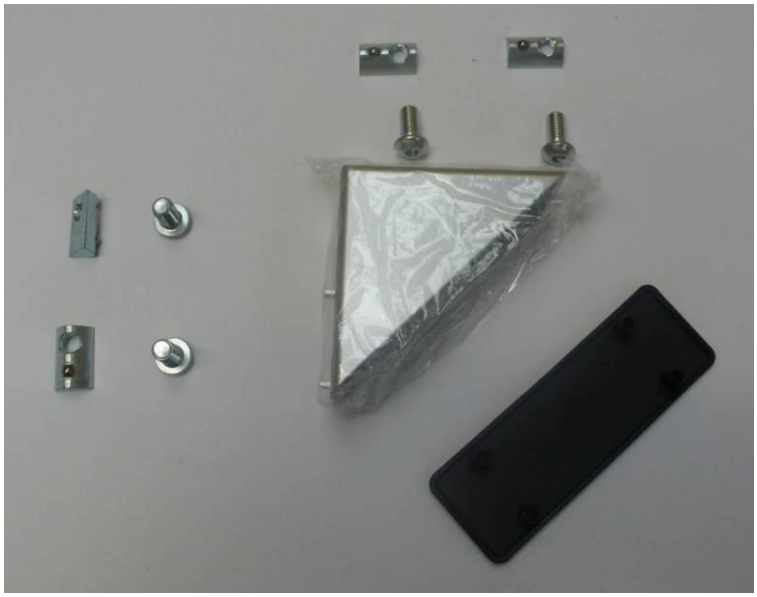
5.2 Mount Bracket to Frame Sides

5.2.1 Additional Parts

Locate the following parts:

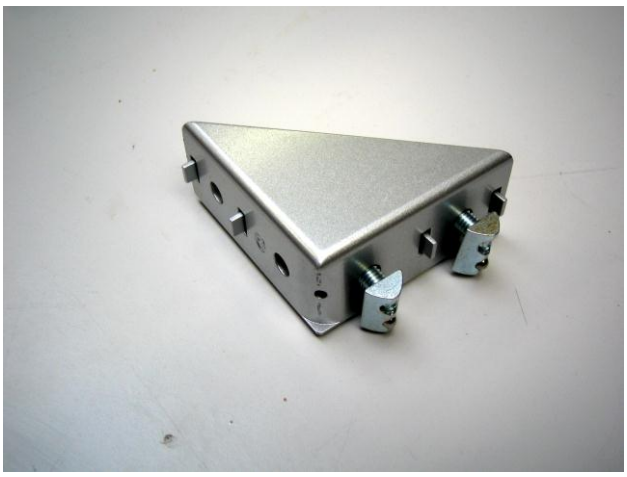
Pos	Amount	Name	Dimension in mm
33	4	Bracket for the “stabilization cross-member” Pos 6	80 x 80
34	4	Cover, black	112 x 40
35	16	Allen screw with rounded head, Fixes base plate to profile	M8 x 16
36	16	Slot nut	M8

.



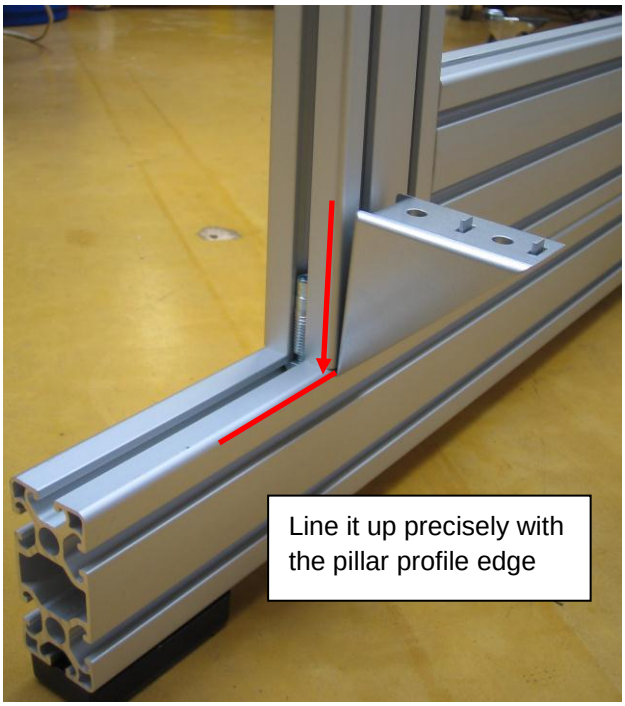
5.2.2 Mount the Brackets

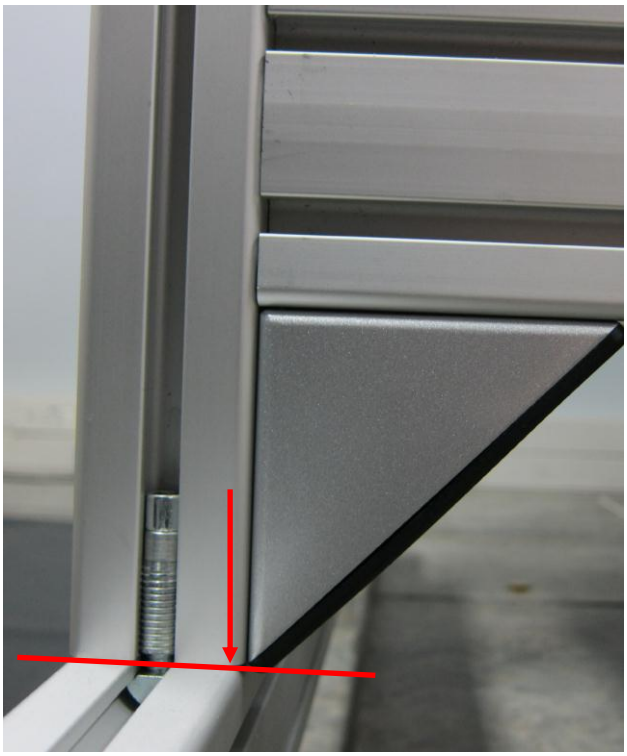
Setup each bracket with two screws and nuts.



Slide in the bracket for the lower stabilization profile like shown.

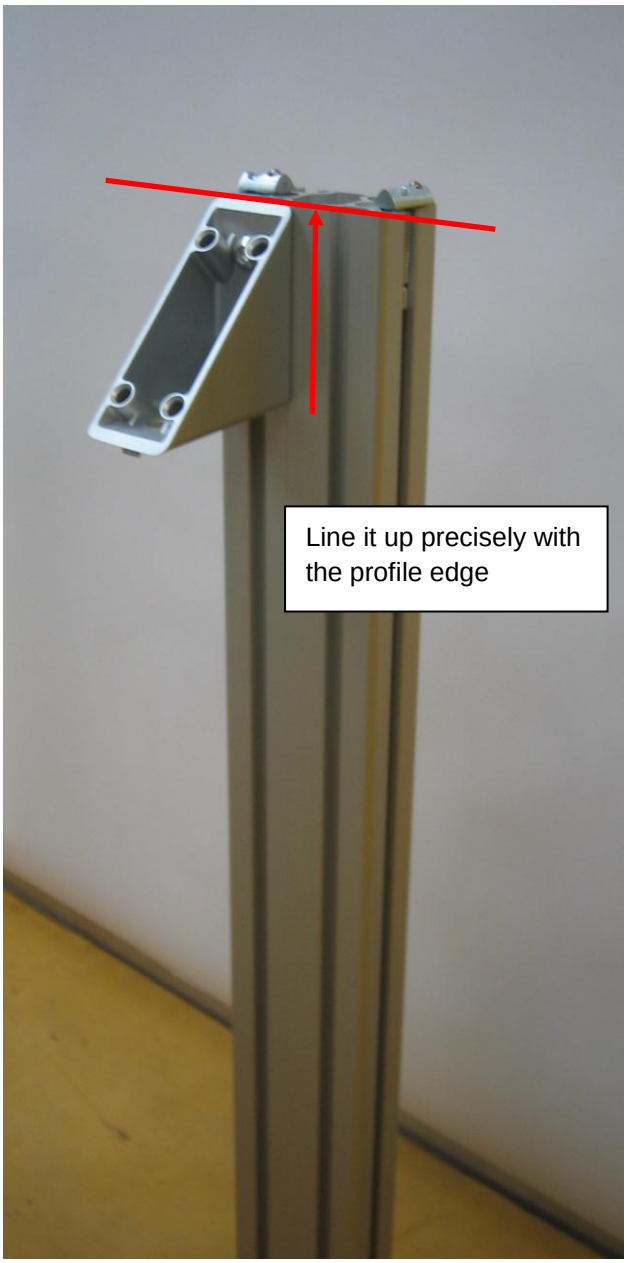
Line it up precisely with the profile edge and tighten up strongly.





Slide in the bracket for the top stabilization profile like shown.

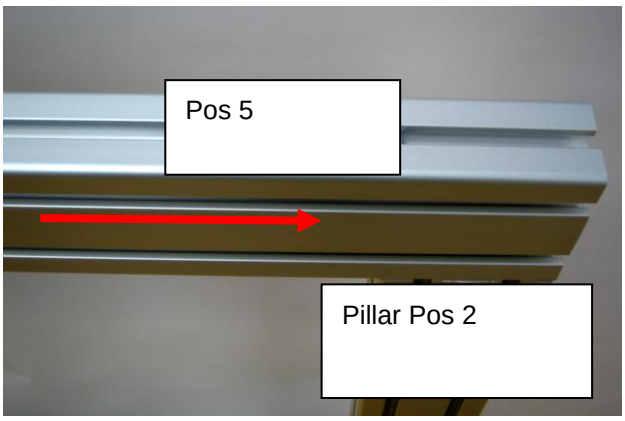
Line it up precisely with the profile edge and tighten up strongly



On the two frame sides, the brackets are mounted mirrored to hold the stabilization profile.

5.3 Mount Cross Member Top

On both sides, shift the profile Pos 5 into the pillar profiles.



5.4 Cross Beams

Don’t fix the screws tightly until the manual recommends it. The profiles should be still moveable until the frame is fixed finally!

5.4.1 Additional Parts

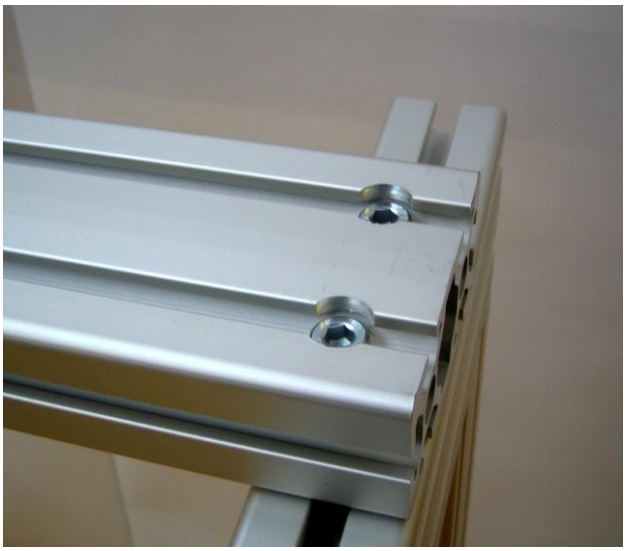
Locate the following parts:

Pos	Amount	Name	Dimension in mm
37	16	Allen screw, fixing Cross-member for printer top / bottom, Pos 1	M8 x 40
38	16	Slot nut	M8

5.4.2 Mount the Cross Beam for TOP Printer

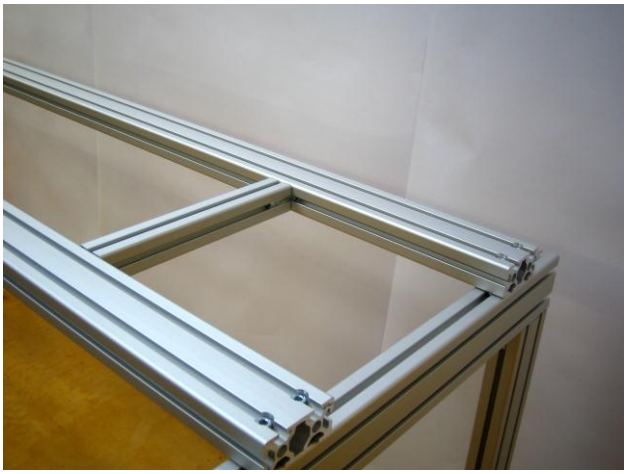
Slide on the top profile (Pos 5) four M8 slot nuts

Put the two cross beams (Pos 1, green colored, 2105 mm) on it. Check that the notch for the screw head is on top. Use for each side two M8 screws to fix the cross beam to profile Pos 5.



Frame with mounted cross beams for printer top.

Mount the profile (Pos 8, brown colored, 305 mm) between the two cross beams.



5.4.3 Mount the Cross Beam for BOTTOM Printer

Slide on the top profile (Pos 5) four M8 slot nuts on each side.

Put the two cross beams (Pos 1, green colored, 2105 mm) on it. Check that the notch for the screw head is on top. Use for each side two M8 screws to fix the cross beam to profile Pos 5.

Mount the profile (Pos 8, brown colored, 305 mm) between the two cross beams.

5.4.4 Mount the Stabilization Cross Beams

Slide in a M8 slot nudge on top and bottom of the frame.

Take the two stabilization profiles (Pos 6, purple colored, 1980 mm)

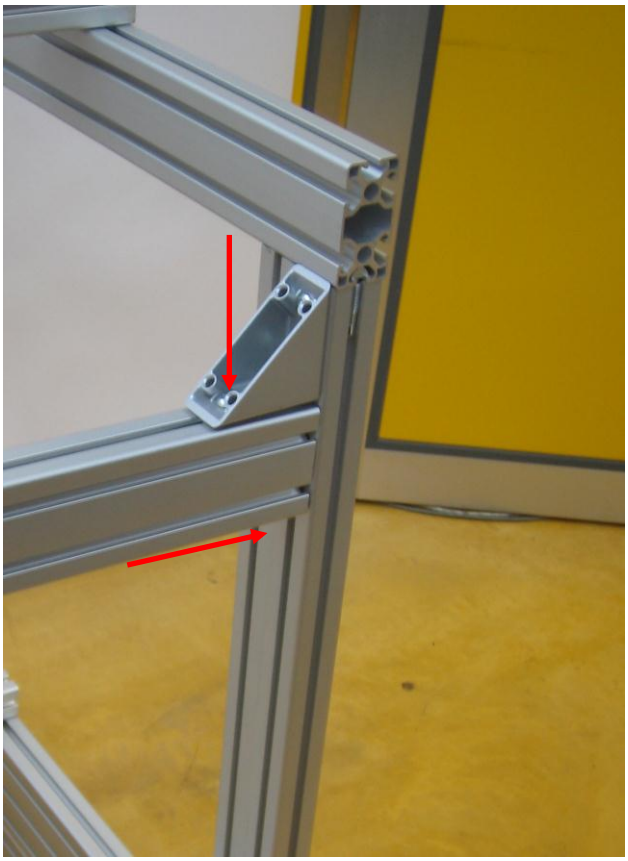
On each side, slide in a M8 slot nudge.

Fix the stabilization profiles to the bracket and to the profile Pos 2.

5.4.5 Tighten the Stabilization Cross Beams

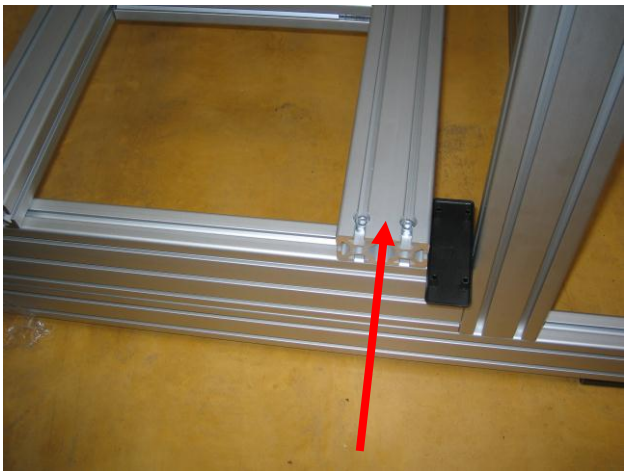
To tighten up the stabilization profiles do like:

1) Start with the top stabilization profile
2) Smoothly tighten up the two screws (shown as red arrows) on both side of the frame
3) Check if the frame is in angle
4) Tighten now both side strongly

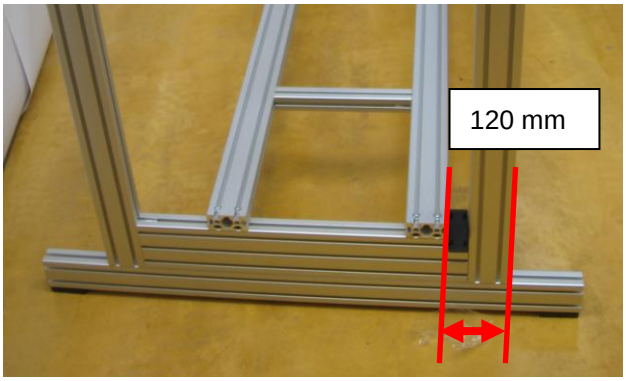


5.4.6 Position the Cross Beam for BACK Printer

Tighten first the cross beam profile for the back printer shown on the right.

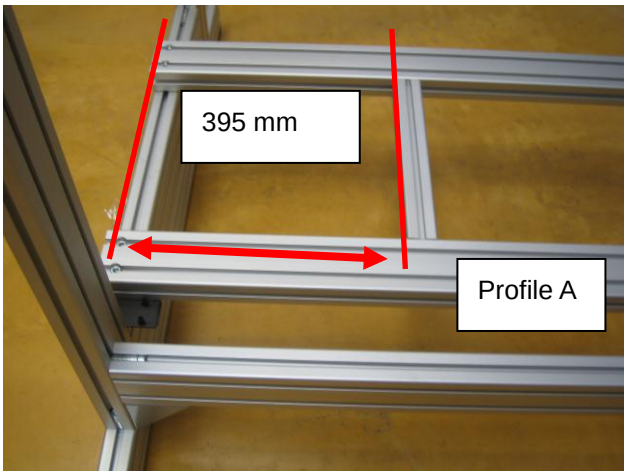


The distance between the profile Pos 2 and the cross beam profile Pos 1 is 120mm.



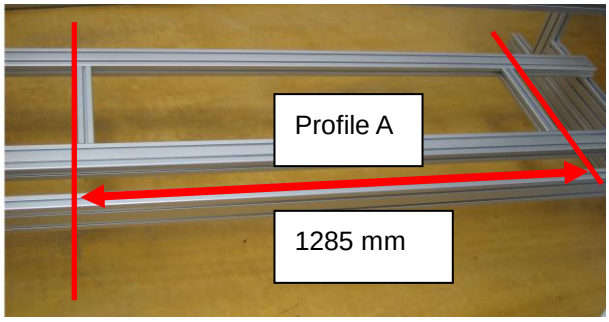
Position the first distance holder (Pos 8, brown colored, 305 mm) 395 mm from the side frame.

Fix only the screw which goes to the profile labeled “A”.



Position the second distance holder (Pos 8, brown colored, 305 mm) 1285 mm from the first distance holder profile.

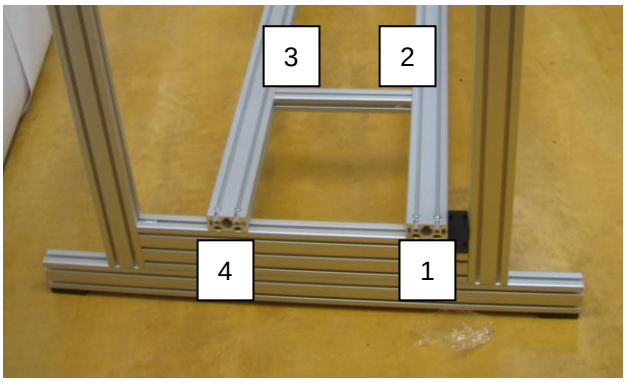
Fix only the screw which goes to the profile labeled “A”.



The picture shows the sequence for tighten up the screws in the correct order.

Finalize the setup of the BACK profile by tighten the screws from the distance holder (3)

Afterwards, tighten the screws which go to the side frame (4).

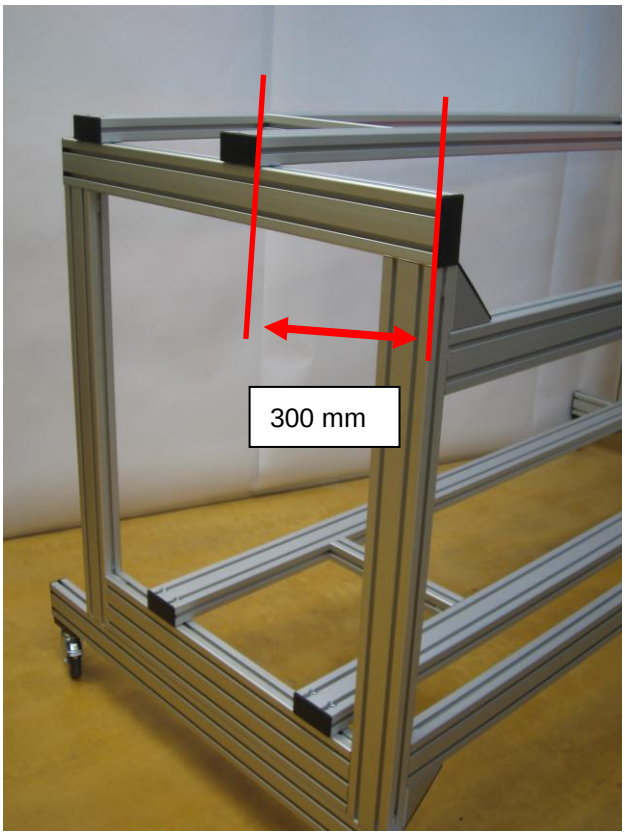


5.4.7 Position the Cross Beam for FRONT Printer

Tighten the cross beam profile for the front printer shown on the right first.

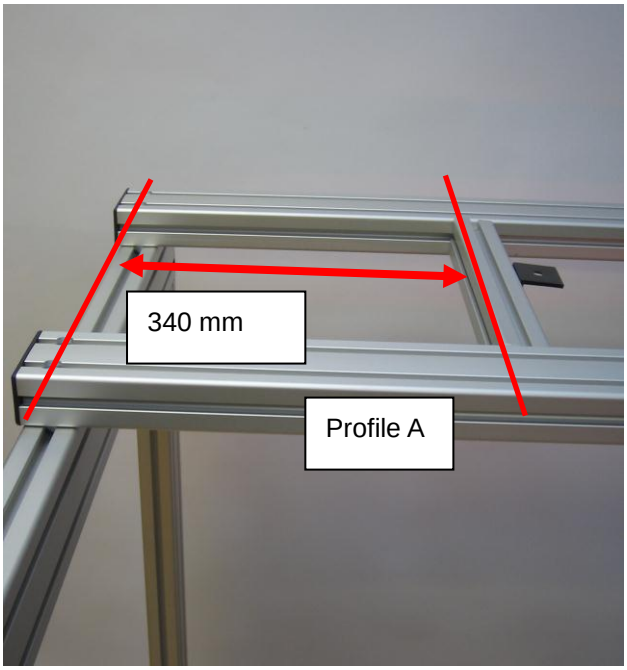
The distance between the edge of profile Pos 5 and the cross beam profile Pos 1 is 300mm.

Fix only the screw which goes to the profile labeled “A”.



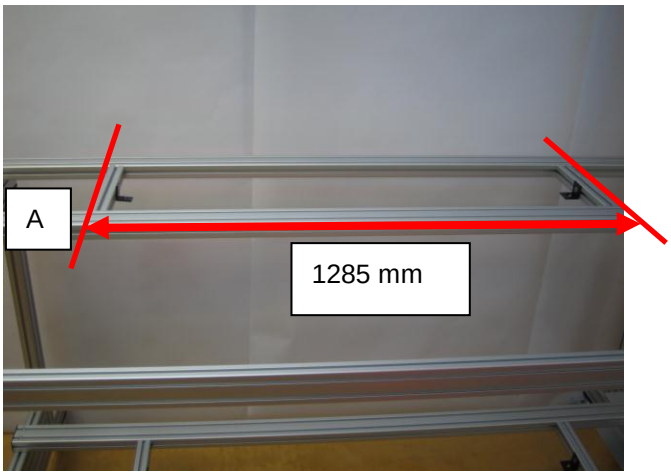
Position the first distance holder (Pos 8, brown colored, 305 mm) 340 mm from the side frame.

Fix only the screw which goes to the profile labeled “A”.



Position the second distance holder (Pos 8, brown colored, 305 mm) 1285 mm from the first distance holder profile.

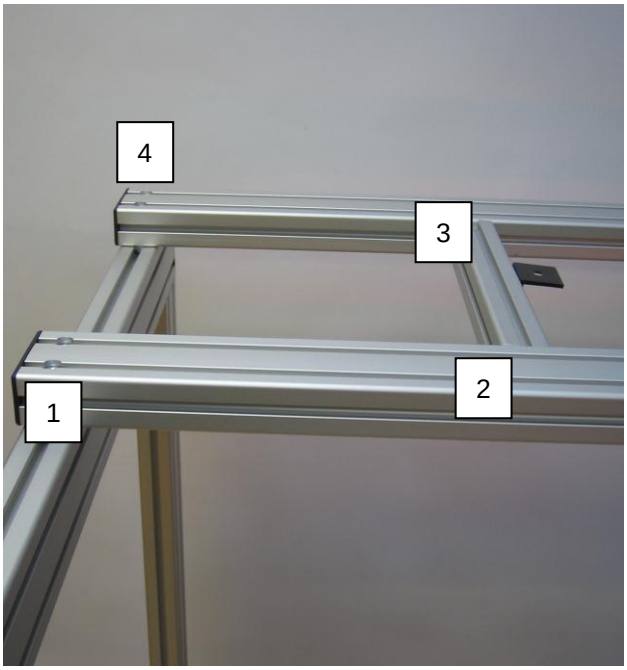
Fix only the screw which goes to the profile labeled “A”.



The picture shows the sequence for tighten up the screws in the correct order.

Finalize the setup of the FRONT profile by tighten the screws from the distance holder (3)

Afterwards, tighten the screws which go to the side frame (4).



5.5 Brackets for Fixing the Printer to the Frame

5.5.1 Additional Parts

Pos	Amount	Name	Dimension in mm
27	4	Bracket Fixes the printers to the frame	40 x 40
28	4	Allen screw with countersunk head	M8 x 10
29	4	Slot nut	M8

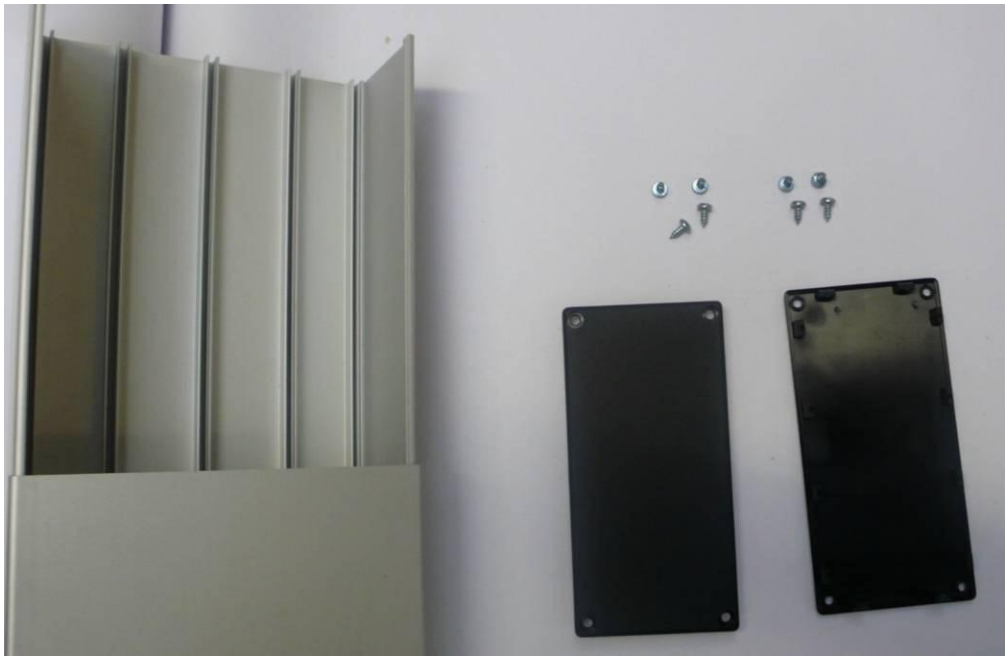
5.5.2 Mount Brackets to Profile

On the distance holder profile, mount inwards the brackets as shown in the picture. Don't fix the screws to tight as they still should be movable.

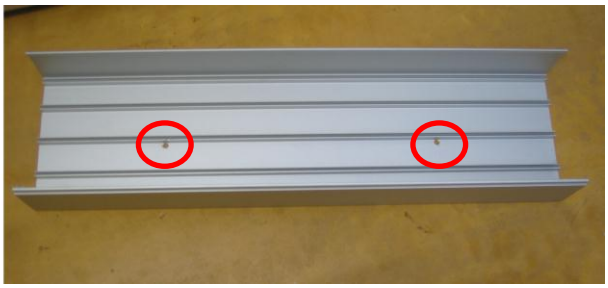
5.6 Mount the Cable Channel

5.6.1 Additional Parts

Pos	Amount	Name	Dimension in mm
30	1	Cable channel Fixes the printers to the frame	120 x 80 x 600
31	2	End cover, black	120 x 80
32	8	Pan head tapping screw	4,2 x 9,5
53	2	M5 x 12	
	2	Slot nut M5	



Drill two 6mm holes into cable channel.



Use two screws M5 x12 with two M5 slot nuts to fix the channel to the frame.

5.7 Add the Wheels

5.7.1 Additional Parts

Pos	Amount	Name	Dimension in mm
22	4	Swivel caster with break	Wheel diameter = 75
24	4	Allen screw Fixes swivel caster to base plate	M10 x 20

5.7.2 Mount the Wheels

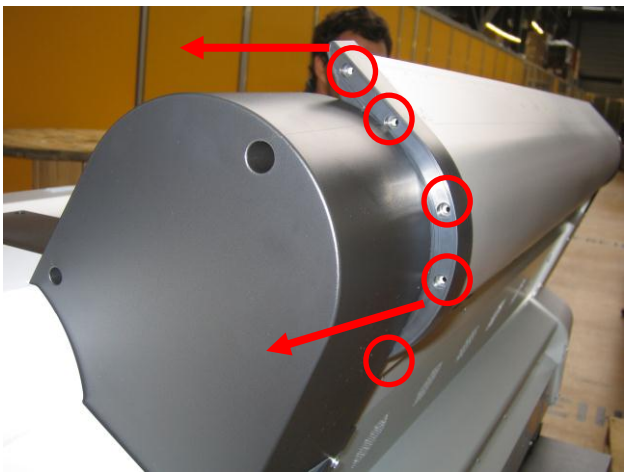
On each side frame, mount the wheels.

6 Prepare the BACK Printer

6.1 Remove the Paper Roll Cover

6.1.1 Roll Cover Assembly

Take the screws off on both sides of the Paper Roll Cover.

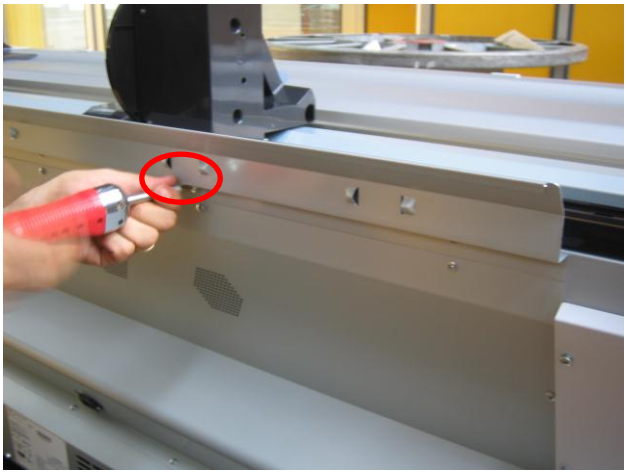


Now spread out the two black plastic parts on both sides to take off the aluminum Paper Roll Cover.

6.2 Optional: Remove the Paper Roll Back Cover

6.2.1 Take off the Screws

Take off the screws and remove the back metal cover.

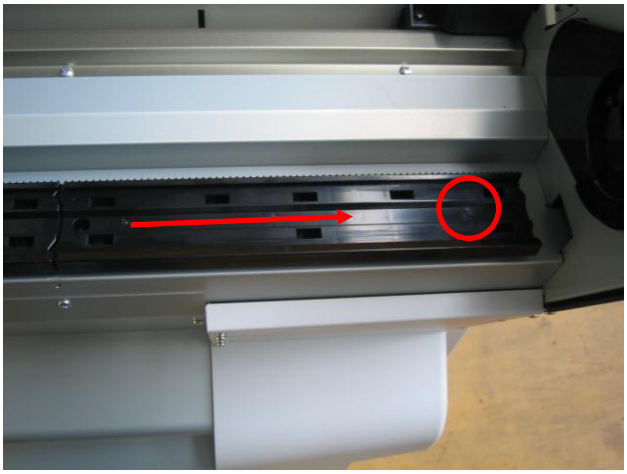


It might be a good idea to leave this angled cover attached to the printer to use this area to place the two rollers during the paper load process.

6.3 Remove the Roll Adapter Holder and Guide

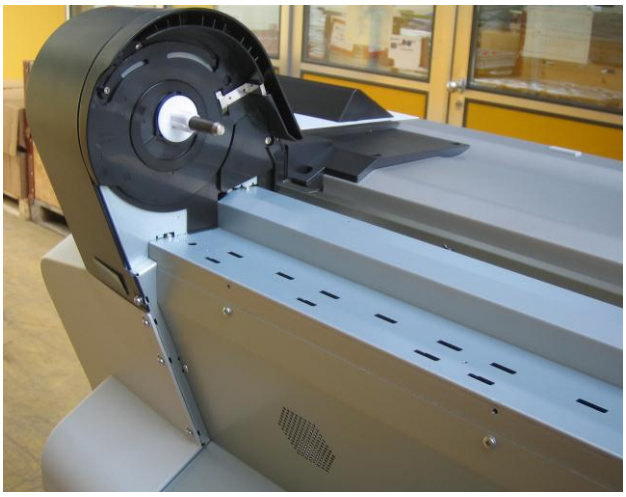
6.3.1 Take off the Guide

Start on the left hand side. For each guide, take off one screw and push afterwards the guide to the left.



6.3.2 Take of the Roll Paper Adapter

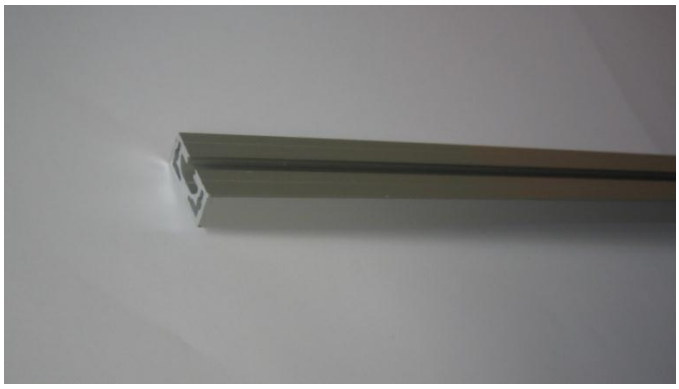
Take off the roll paper adapter.



6.4 Mount the Base Profile for Paper Guide / Camera holder

6.4.1 Additional Parts

Pos	Amount	Name	Dimension in mm
51	1	Profile for Printer Bottom „for camera and paper feed holder“	40 x 80 x 1410
52	4	Screws M4 x 25	



6.4.2 Mount the Profile

Take off the screws on the correct position on the Epson printer. Mount the profile by using the M4 screws.

6.4.3 Optional: Take off the Black Side Cover

The Epson technician might need access to the print head system when doing maintenance on the Epson printer.

For the accessing the print head, the right cover needs be taken off. The cover is locked with several screws on the printer side and the black side cover shown in the image to the left.

Taking the black side cover off, reduces the disassembling of the Preproofer paper feed system during an Epson service.

6.5 Set the Wires

6.5.1 Additional Parts

Pos	Amount	Name	Dimension in mm
101	1	Electronic Box	
102	1	Cable to connect the FRONT printer panel, approx. 2 meter	
103	1	Cable to connect the BACK printer panel, approx. 4 meter	
104	2	Velcro for fixing the electronic box to the printer, 8cm	

CUT – Printer BOTTOM
PAUSE – Printer TOP
MOVE – Paper Printer BOTTOM
PAPER – DOWN
PAUSE – Printer BOTTOM
Power

6.5.2 Open PCB Cover on the Epson Printer

Locate the cover and remove 4 screws.

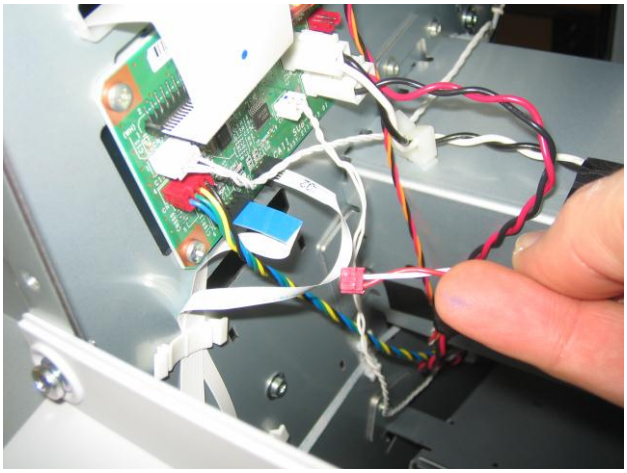
6.5.3 Cable from Electronic Box

Put the white cable from the Electronic Box as shown into the Printer.

6.6 CUT MOTOR Setup

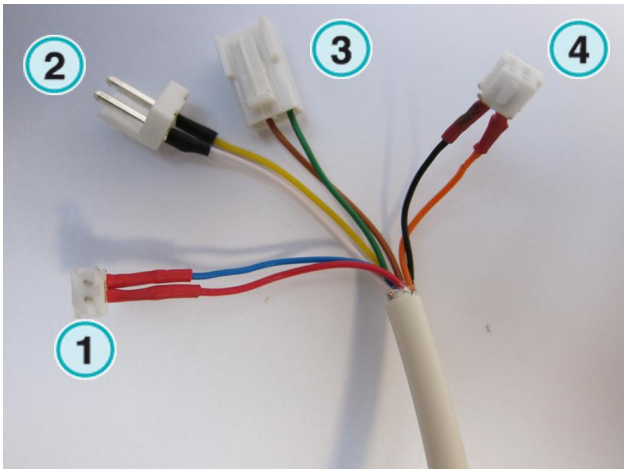
6.6.1 Remove the CUT Motor Cable

Take off the Cut Motor connector at the PCB board, identified by WHITE / RED cable pair.



Plug the Cut Motor cable to the connector 1 from the Electronic Box.

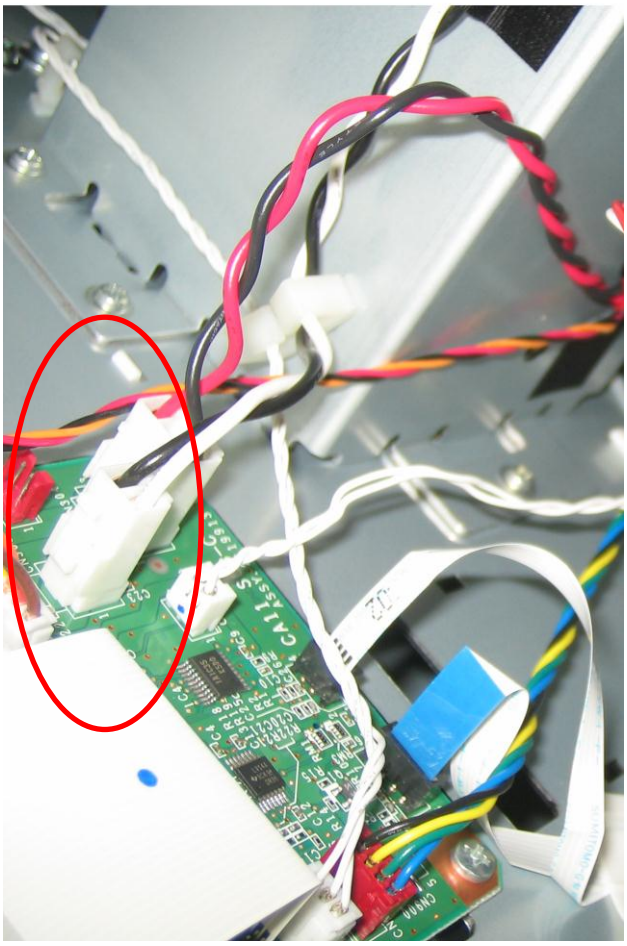
Plug the connector 4 from the Electronic Box into the PCB board where previously the original Cut Motor cable has been connected.



6.7 PAPER FEED Motor Setup

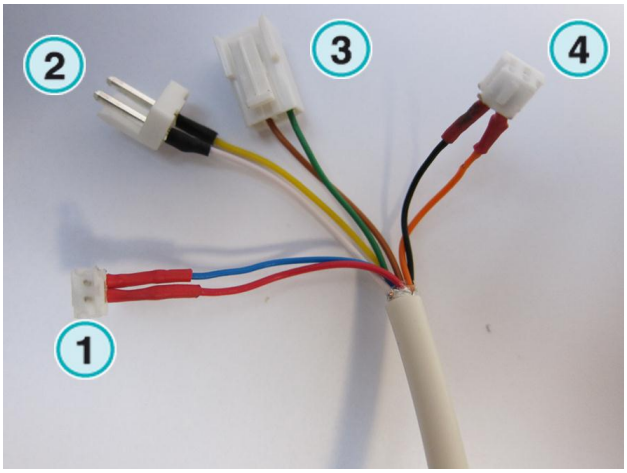
6.7.1 Take Off the Paper Feed Motor Cable

Take off the cable pair with the black and white cables (thick cables).

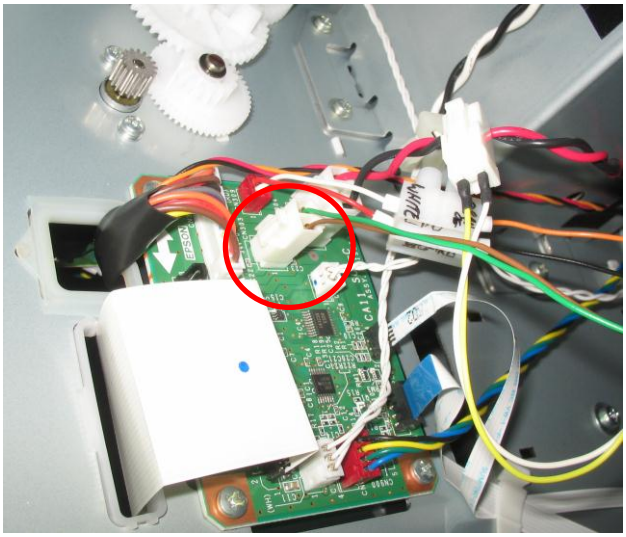


Plug the Paper Feed Motor cable to the connector 2 from the Electronic Box.

Plug the connector 3 from the Electronic Box into the PCB board where previously the original Paper Feed Motor cable has been connected.



Cables at the PCB board after the connecting to the Electronic Box.



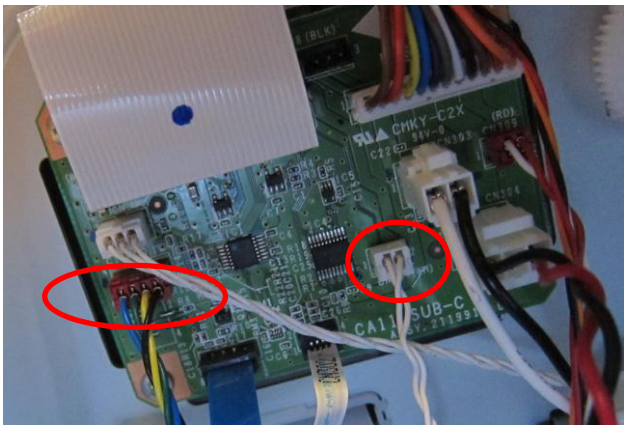
6.8 CUT MOTOR ENCODER Setup - Electronic Box - HW Release 2

In November 2011, a new designed Electronic box for the Preproofer has been released. The new Electronic box is recognized by having three RJ11 connectors on the opposite side of the power connector.

Beside internal hardware changes, the electronic allows to control the cutter system on the Epson printer through the cut motor encoder.

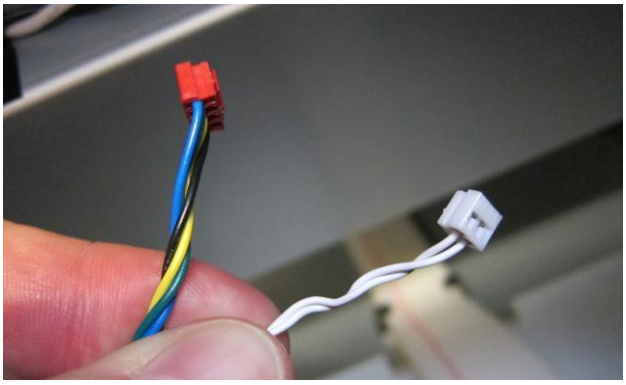
6.9 Take Off the End Switch and Encoder Cable

Locate on the PCB board the Cutter End Switch cable pair (connector with the two white cables) and the Cut Motor Encoder cable (connector with blue, green, yellow and black cable).

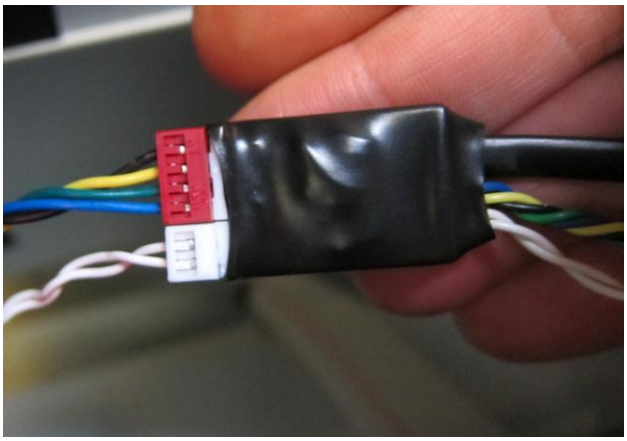


6.9.1 Take Off and Reconnect the End Switch and Encoder Cable

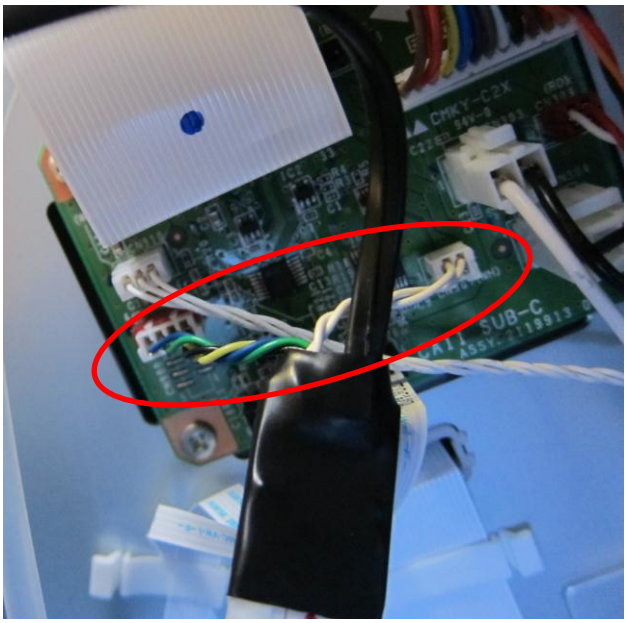
Plug out the two cables.



Plug the two cables into the connector coming from the ElectronicBox.



Plug the two cables which are coming from the backside of this cable into the two free connectors.



6.10 Wire the Control Panel Back Printer

6.10.1 Remove the Control Panel

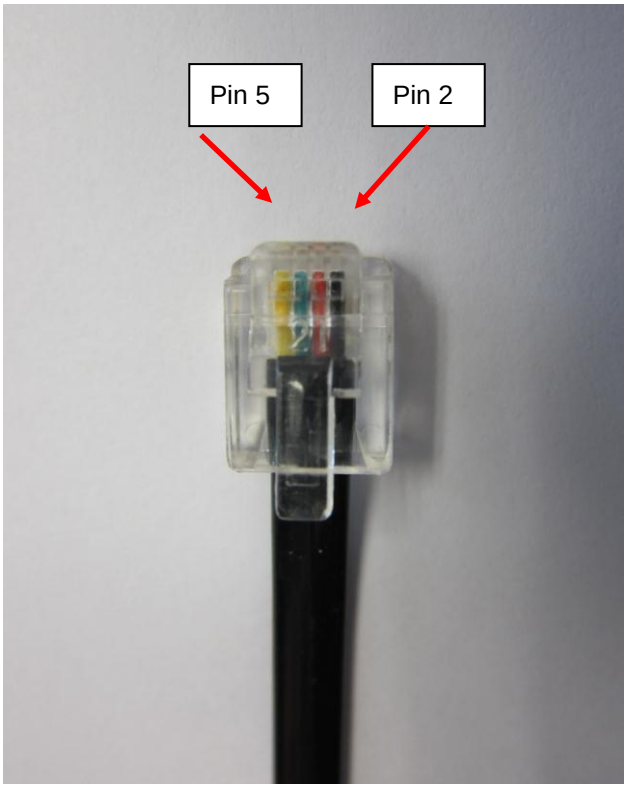
Remove the control panel like shown.

Unplug the panel from the flat ribbon cable.

Take off the metal cover.

6.10.2 Solder the Wires to the Panel

Cable layout is shown on the right.



Pin 1 and Pin6 are empty. The first cable on the right is Pin2!

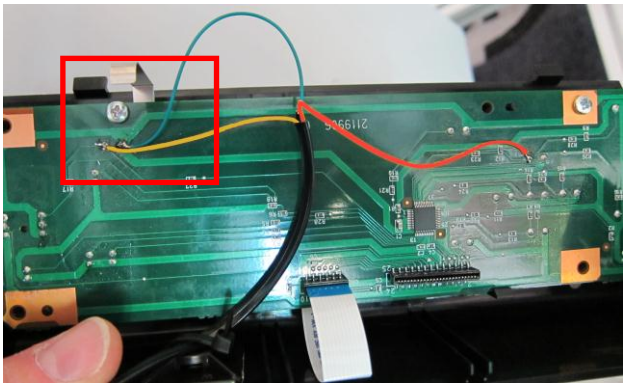
Locate the solder points for GROUND and PAUSE.

Thick conducting path is GROUND, thin path is PAUSE.

On the picture to the right, the cables are:

YELLOW = PAUSE

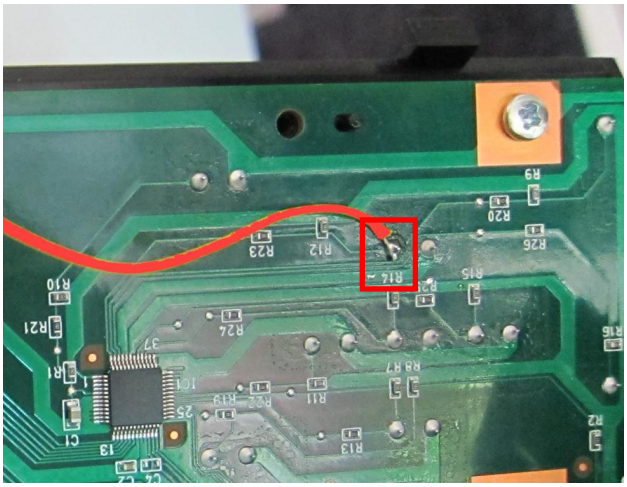
GREEN = GROUND



Locate the solder point for “PAPER FEED DOWN”.

On the picture to the right, the cables are:

RED = PAPER FEED DOWN



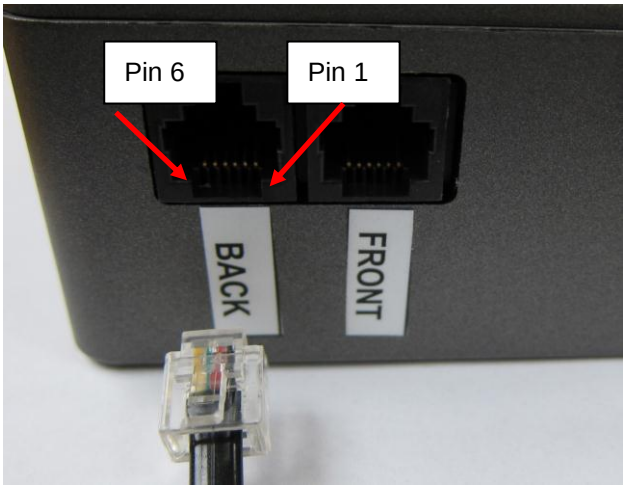
Check with the delivered cable (RJ11 connector at one end) the correct cable assignment and solder the wires to the panel.

For the BACK Printer, the pins are located like

Pin 3 = PAPER FEED DOWN

Pin 4 = GROUND

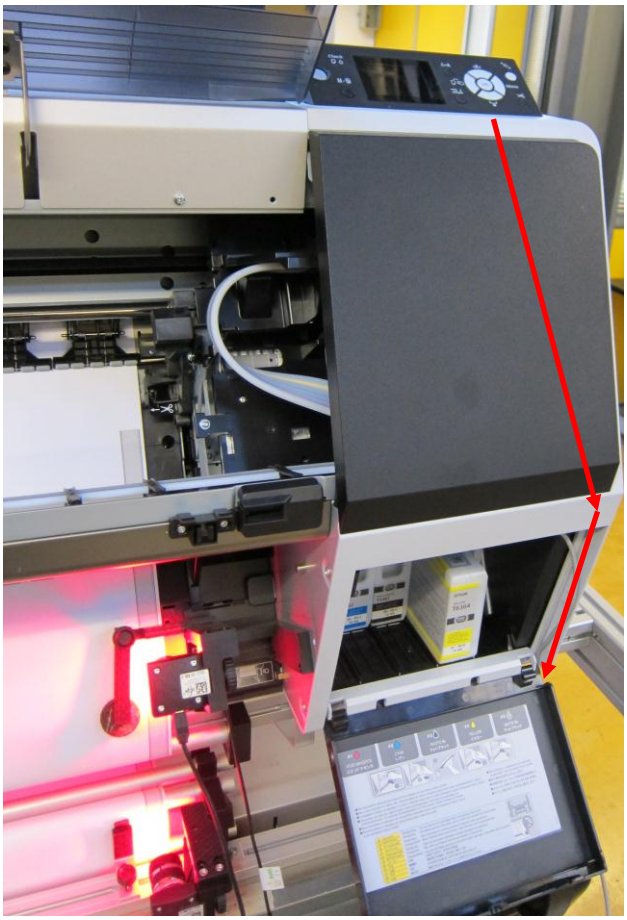
Pin 5 = PAUSE



For the FRONT Printer assignment, see chapter 7.1.2

6.10.3 Guide the Cable to the Electronic Box

Put the cable straight down through the hole where the flat ribbon cable goes through. Guide it to the side of the ink compartment and bring it out below the ink compartment.



7 Prepare the FRONT Printer

7.1 Wire the Control Panel Front Printer

7.1.1 Take off the Control Panel

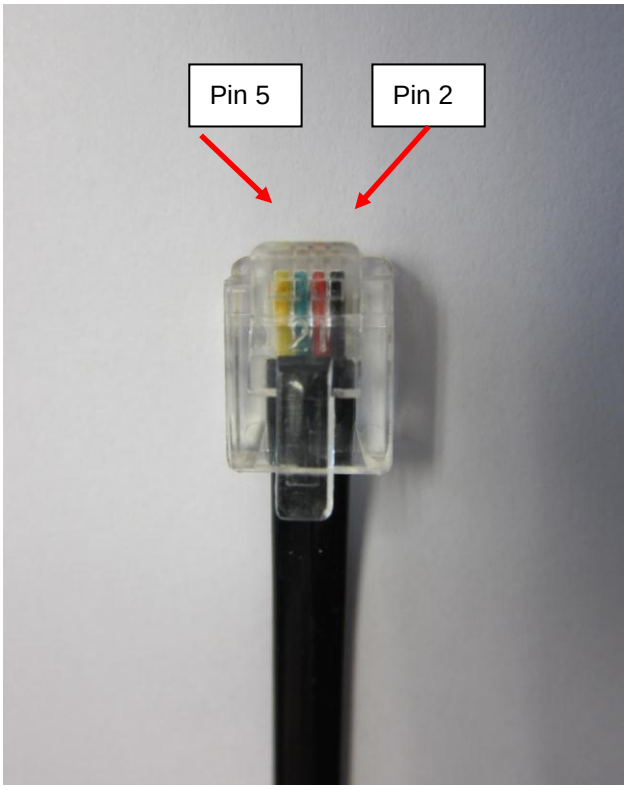
Remove the control panel like shown.

Unplug the panel from the flat ribbon cable.

Take off the metal cover.

7.1.2 Solder the Wires to the Panel

Cable layout is shown on the right.



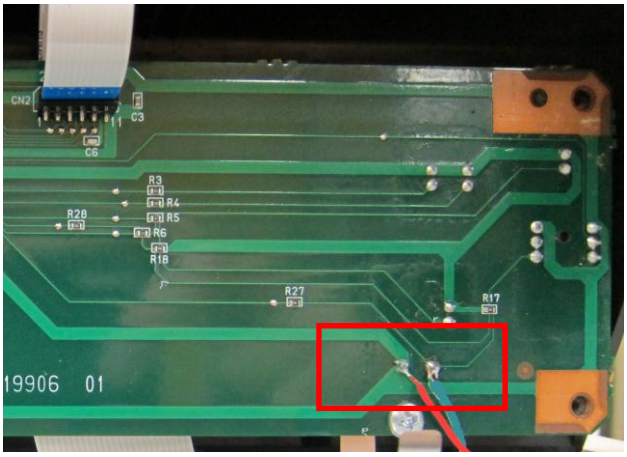
Pin 1 and Pin 6 are empty. The first cable on the right is Pin 2!

Locate the solder points for GROUND and PAUSE.

On the picture to the right, the cables are:

GREEN = PAUSE

RED = GROUND

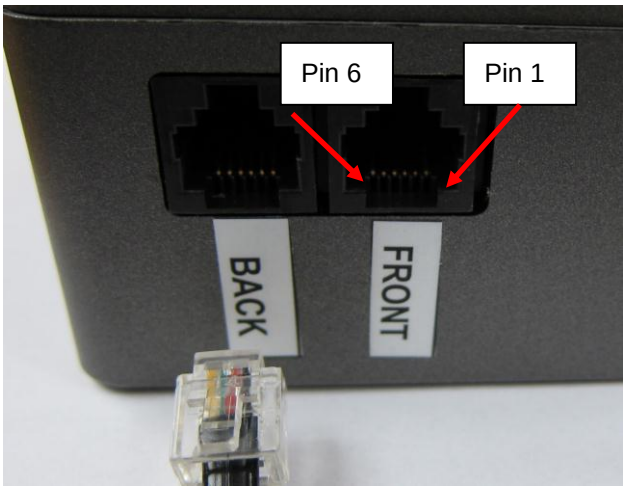


Check with the delivered cable (RJ11 connector at one end) the correct cable assignment and solder the wires to the panel.

For the FRONT Printer, the pins are located like

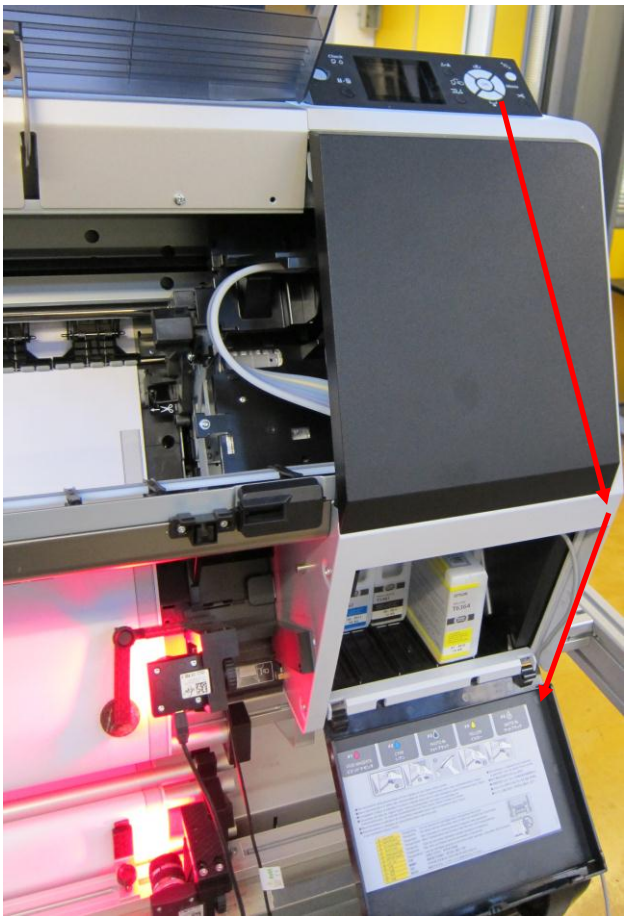
Pin 3 = GROUND

Pin 4 = PAUSE



7.1.3 Guide the Cable to the Electronic Box

Put the cable straight down through the hole where the flat ribbon cable goes through. Guide it to the side of the ink compartment and bring it out below the ink compartment.



8 Set the Printers into the Stand

8.1.1 Additional Parts

Pos	Amount	Name	Dimension in mm
54	4	Aluminum Cylinder	20mm diameter x 23mm length
55	4	Screws M6 x 40	
	4	Washer M8 wide	

8.2 Back Printer

Set the back printer on the stand.

Note

Tighten the printer immediately to the stand with the delivered screws.

Mount the printer to the stand.

8.3 Front Printer

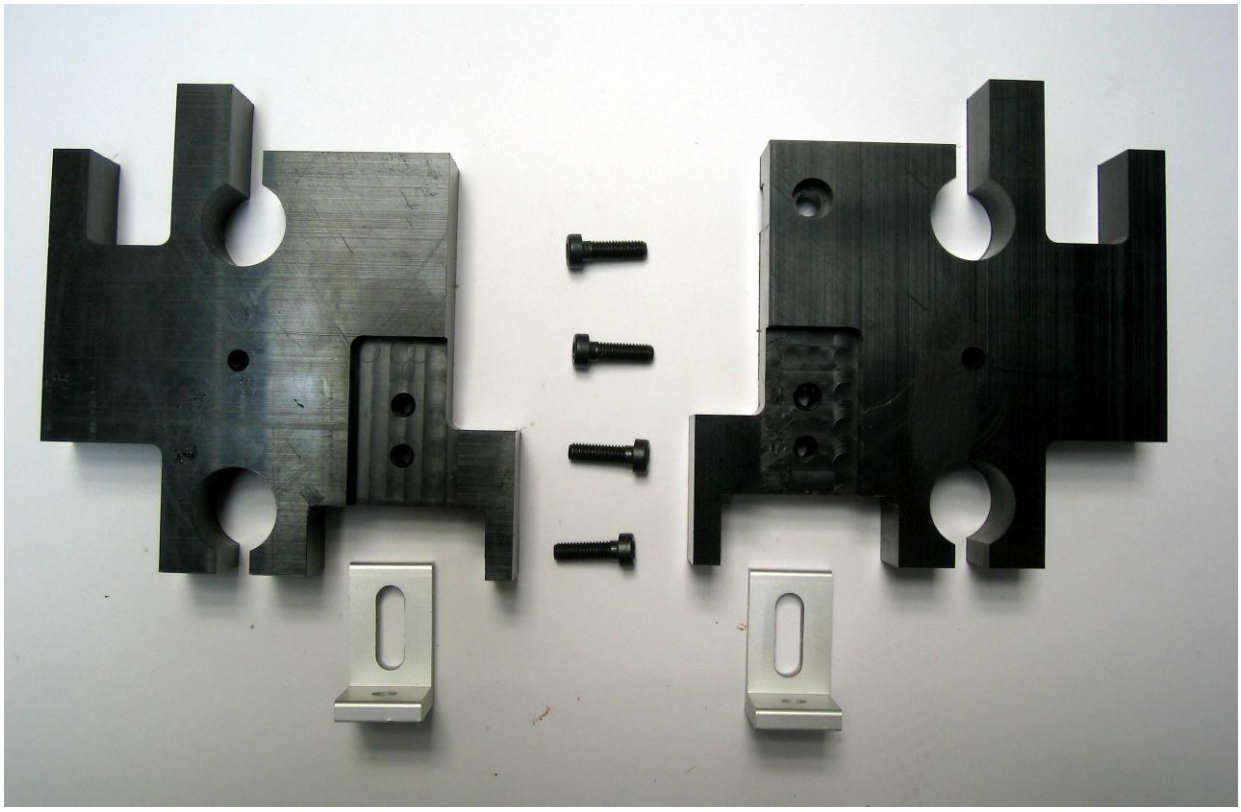
Set the back printer to the stand and tight it immediately to the stand with the screws.

9 Paper Guide / Camera System

9.1 Side parts - Step 1

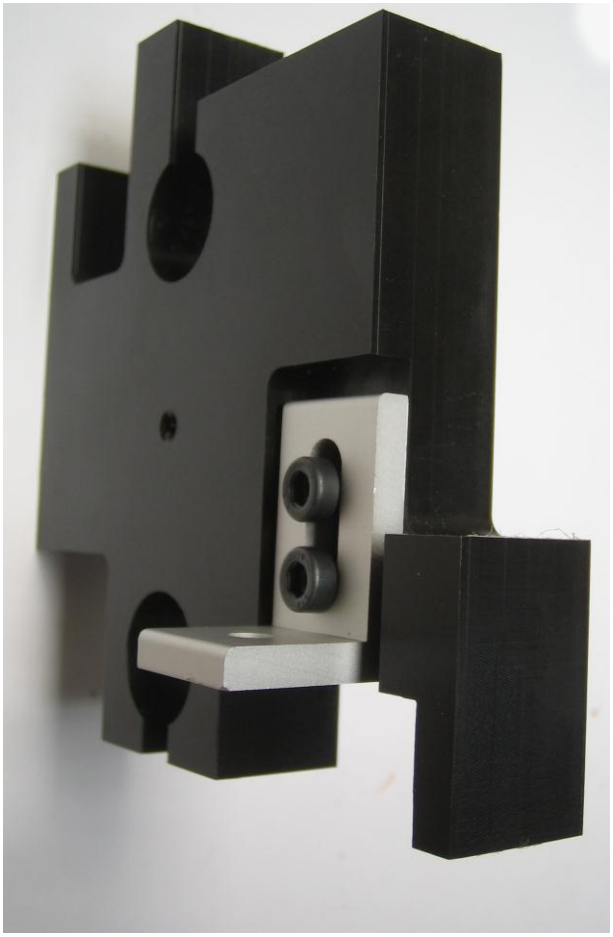
9.1.1 Parts used

Pos	Amount	Name	Dimension in mm
03	1	Left sided holder	
04	1	Right sided holder	
56	2	Bracket	25 x 35
57	5	Screw M5 x 16	

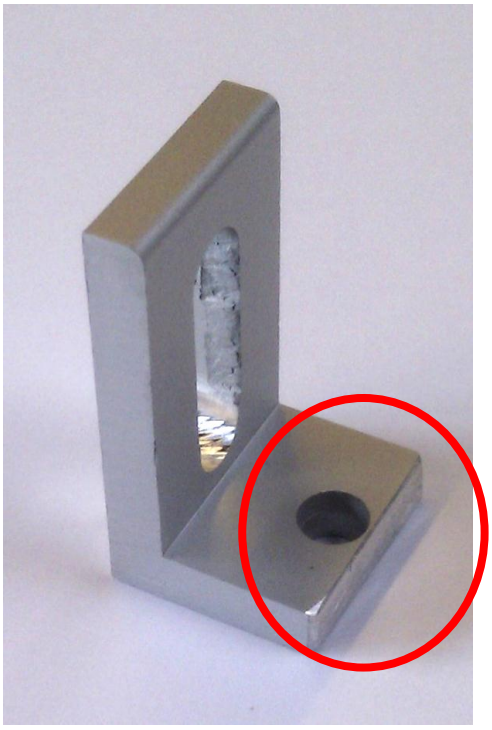


9.1.2 Assembly

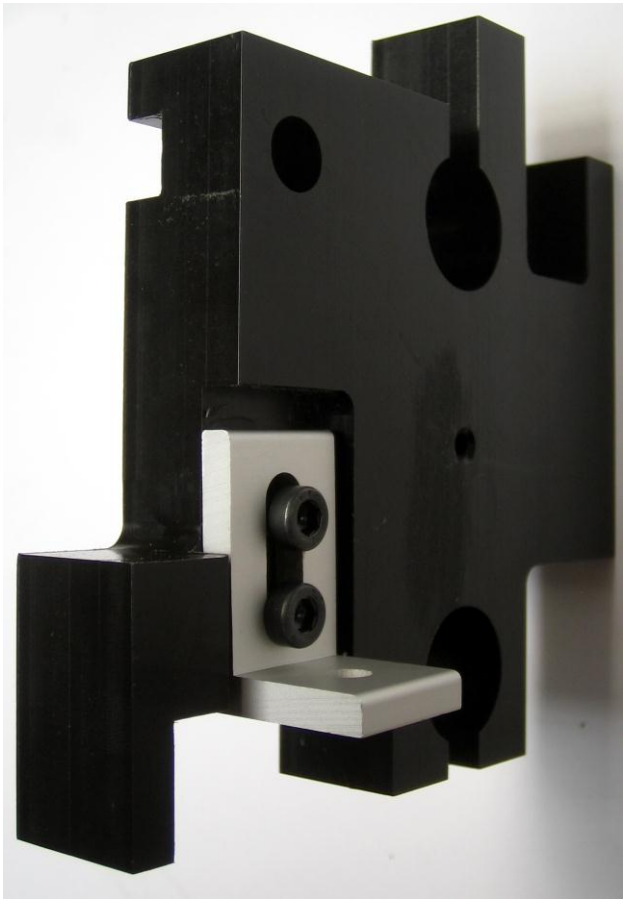
Mount the bracket for the left holder as shown.



Use on this holder, the bracket which is shorter on this side.



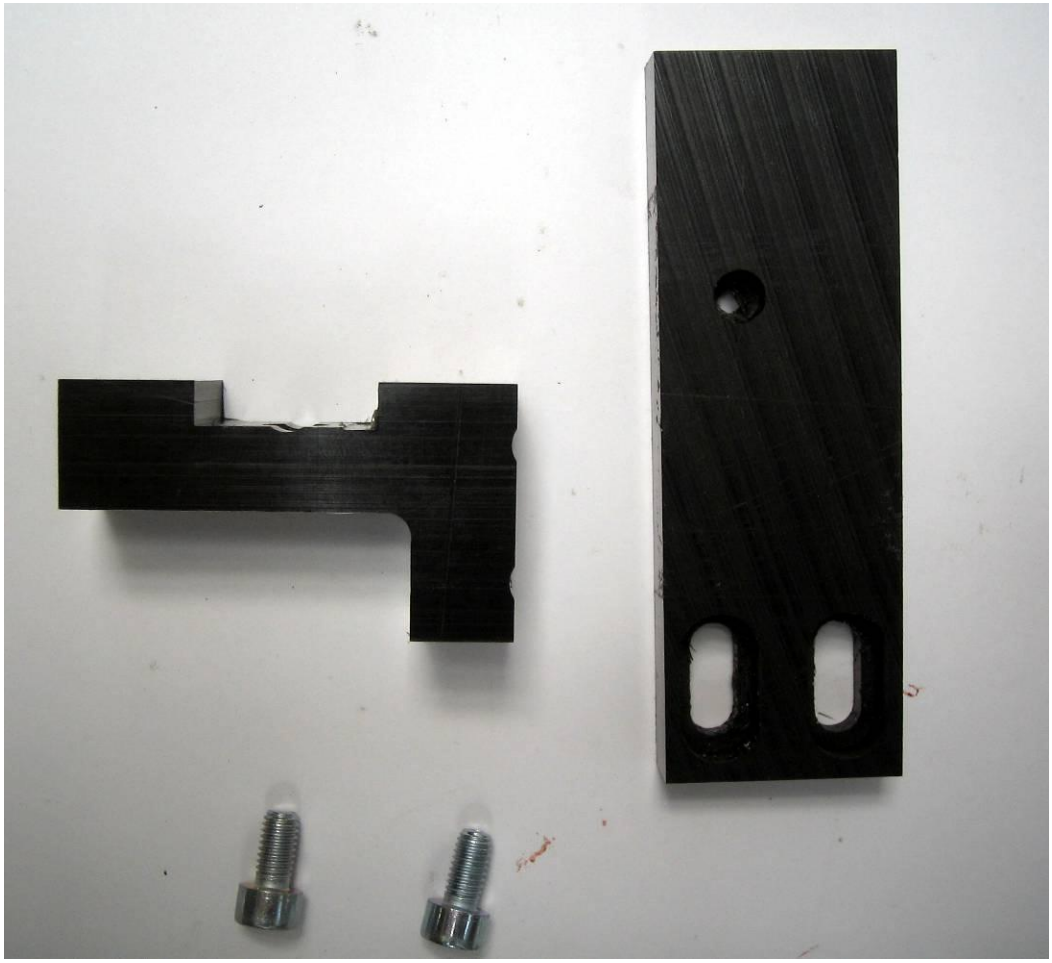
Mount the bracket as shown for the right holder.



9.2 Side Parts - Camera Holder BACK Printer

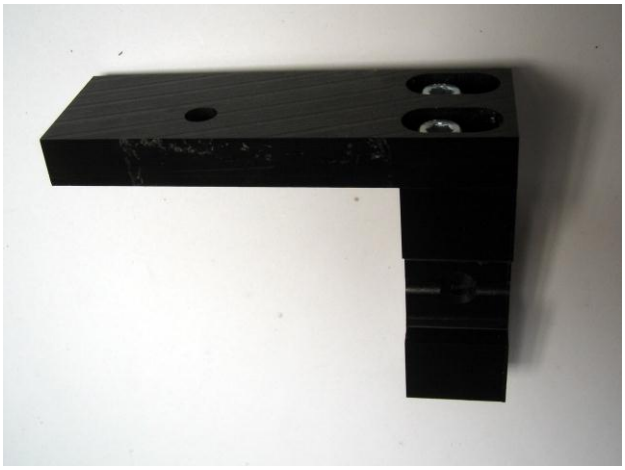
9.2.1 Parts used

Pos	Amount	Name	Dimension in mm
06	1	Camera holder BACK printer	
07	1	Camera holder	
58	2	Screw M5 x 10	



9.2.2 Assembly

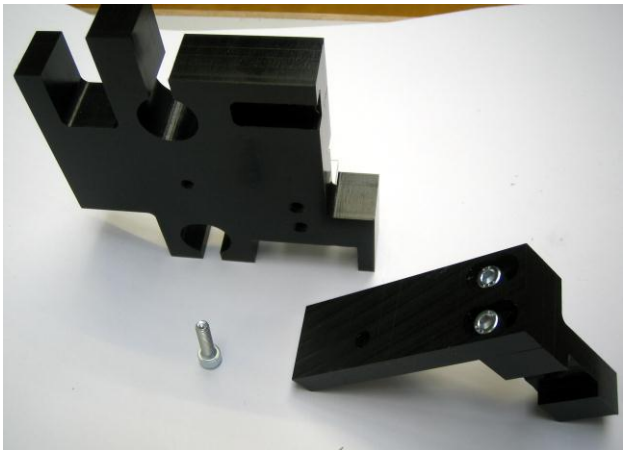
Mount the camera parts as shown.



9.3 Assembly „Right Holder“ and „Camera holder“

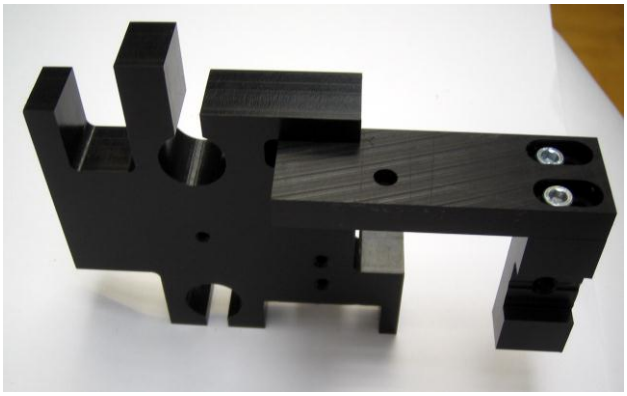
9.3.1 Parts used

Pos	Amount	Name	Dimension in mm
59	1	Screw M5 x 20	



9.3.2 Assembly

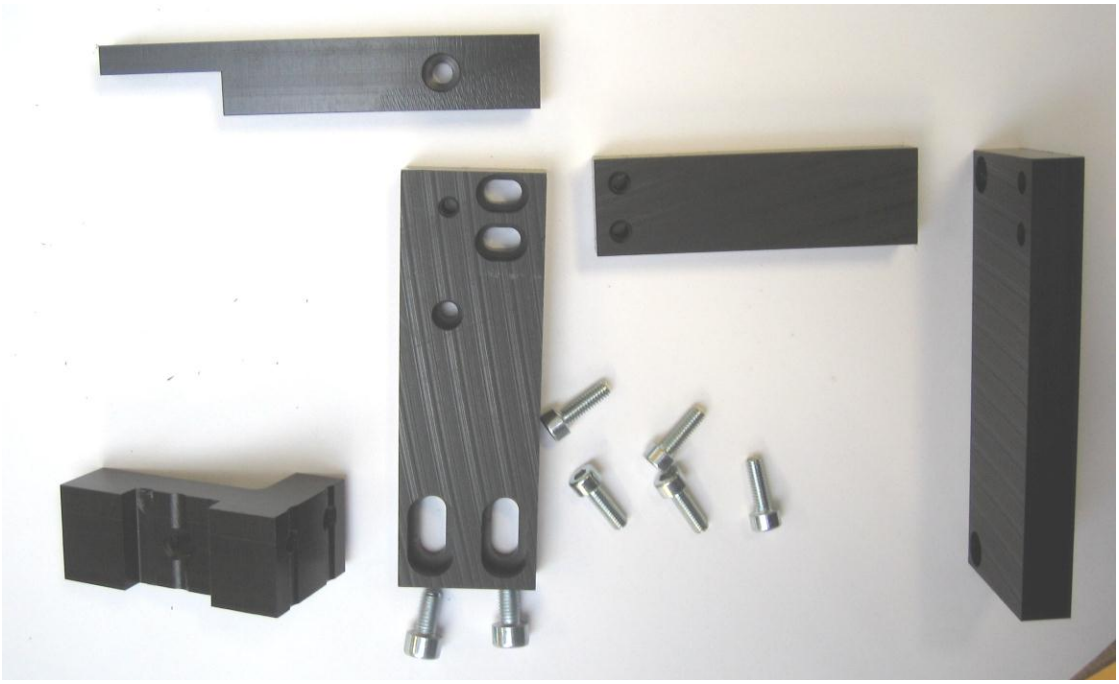
Assembly now the two parts like shown.



9.4 Assembly Camera Holder Front Printer

9.4.1 Parts used

Pos	Amount	Name	Dimension in mm
07	1	Camera holder	
08	1	Camera holder for Front printer	
09	1	Camera holder Front Printer, mount to Epson Printer	
10	1	Distance holder, set between Pos 8 and 9	
11	1	Paper positioning support	
60	2	Screws M5 x 10	
61	5	Screws M4 x 12	



9.4.2 Assembly

Assembly now the two parts like shown

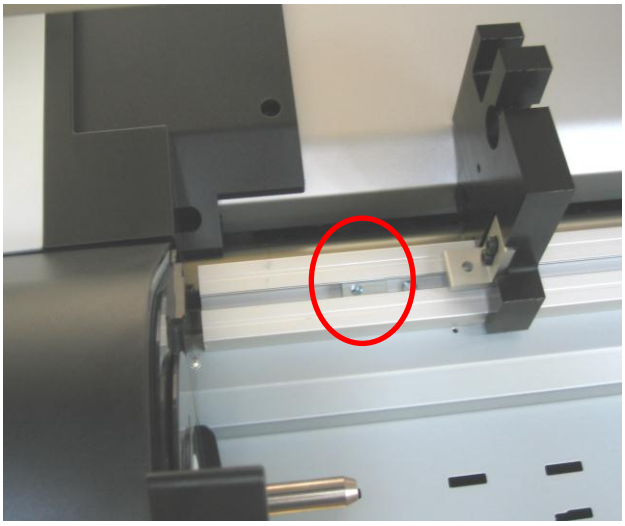
9.5 Mount Side Holder Parts to BACK printer

9.5.1 Additional parts

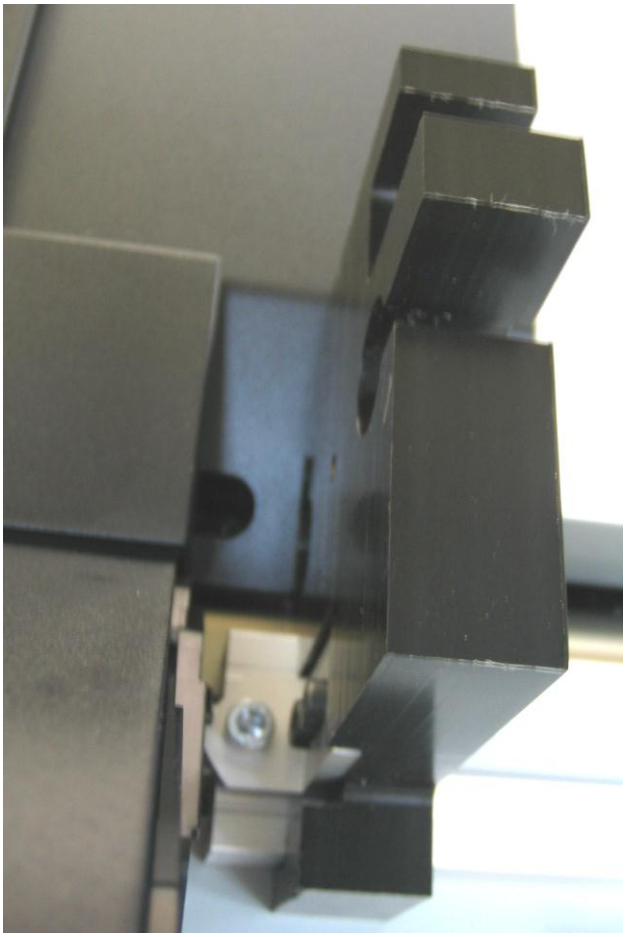
Pos	Amount	Name	Dimension in mm
62	2	Screws M5 x 14	
63	2	Slot Nut (thin) M5	

9.5.2 Mount the side holders to Profile

Put the thin M5 slot nut into the profile like shown.



Use the M5 screw to fix the side holder to the profile. Push the side holder as much as possible to left side position.



Do the same on the opposite side.

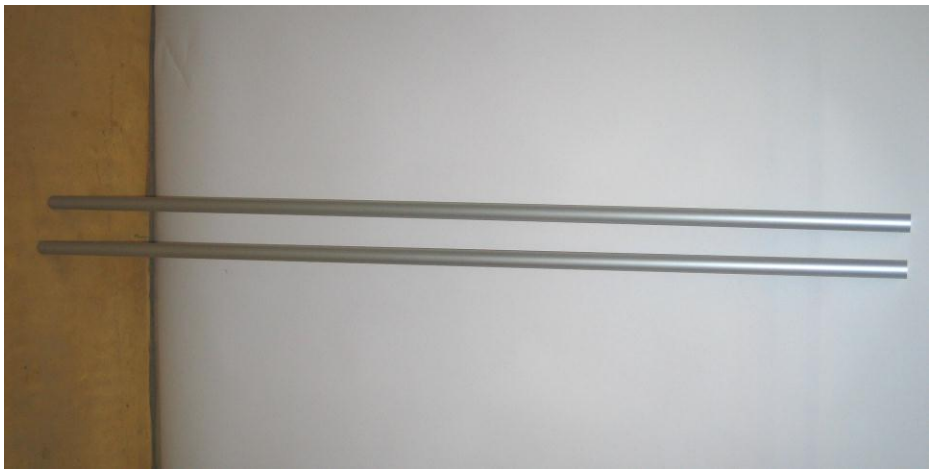
Put a thin slot nut into the profile. Use the M5 screw to fix the side holder to the profile.

The distance between the side holders are 1166mm, measured from the outer side to the outer side of the frame holders.

9.6 Paper Guide Tubes

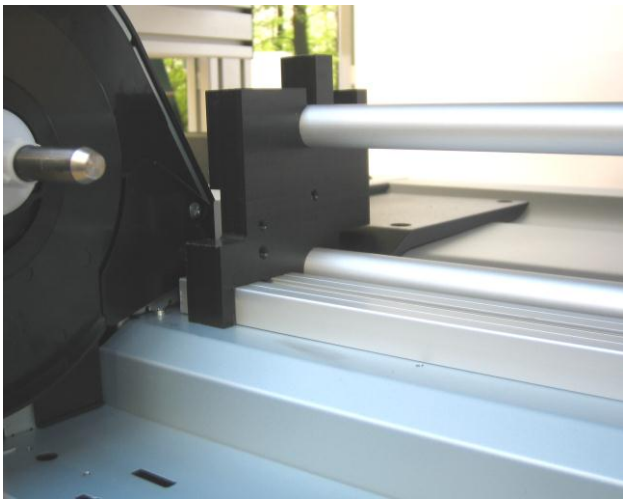
9.6.1 Additional parts

Pos	Amount	Name	Dimension in mm
64	2	Aluminum tubes, 20mm diameter	1165



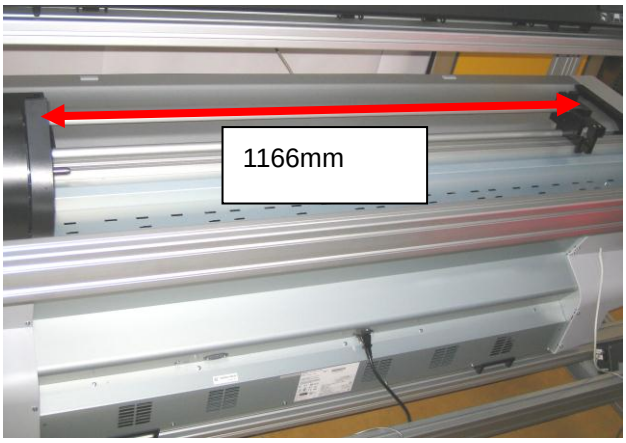
9.6.2 Mount Paper Guide Tubes

Mount the two tubes into the side holder left.

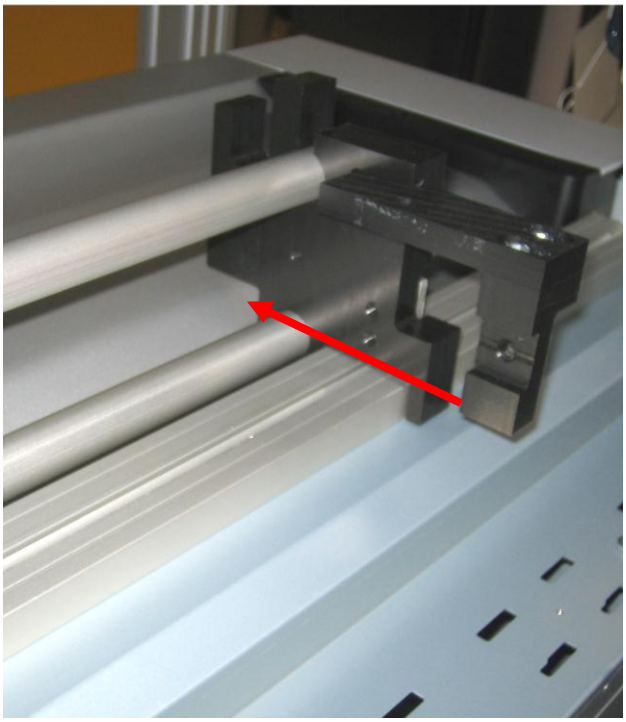


Shift the right sided side holder into the tubes.

The distance between the two side holders is 1166mm, measured from the outer side of the side holders.



Push the side holder in this direction and tighten the screw.



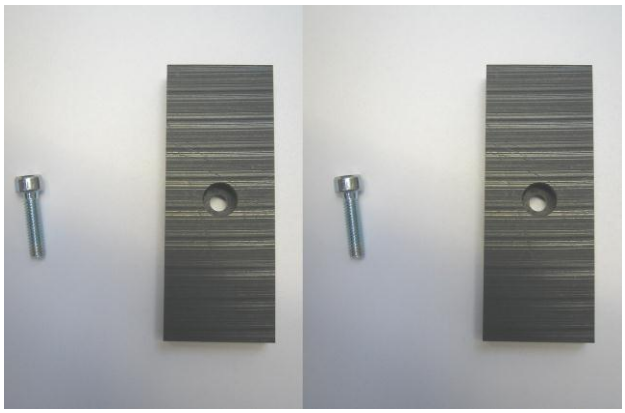
Note:

The upper tube should rotate as smoothly as possible.

9.7 Tube Stopper

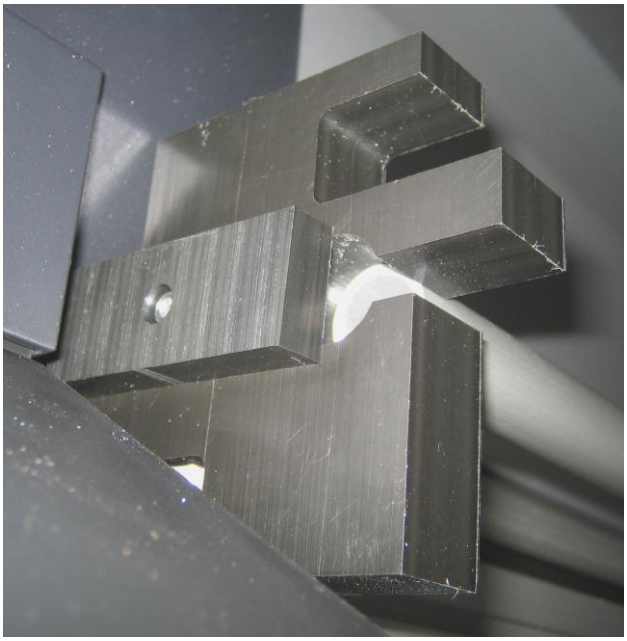
9.7.1 Additional parts

Pos	Amount	Name	Dimension in mm
65	2	Screw M4 x 16	
05	2	Side parts	



9.7.2 Mount tube stopper

Mount it on the left side holder.



Mount it on the right side holder.

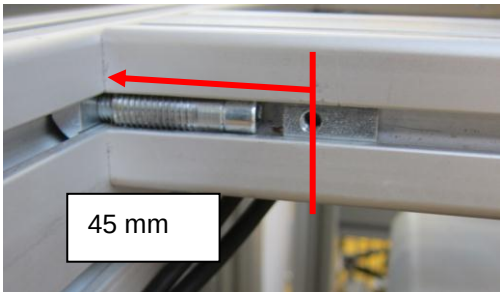
9.8 Add Slot Nuts to Profile Front Printer

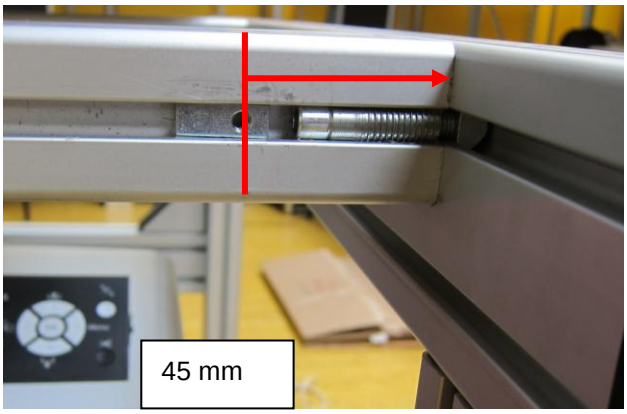
9.8.1 Additional Parts

Pos	Amount	Name	Dimension in mm
66	6	Slot nut M5	

9.8.2 Slot nuts for Paper Guide Profile

Mount four M5 slot nuts into the profile where the Front printer stands on, each 45 mm from the side frame.





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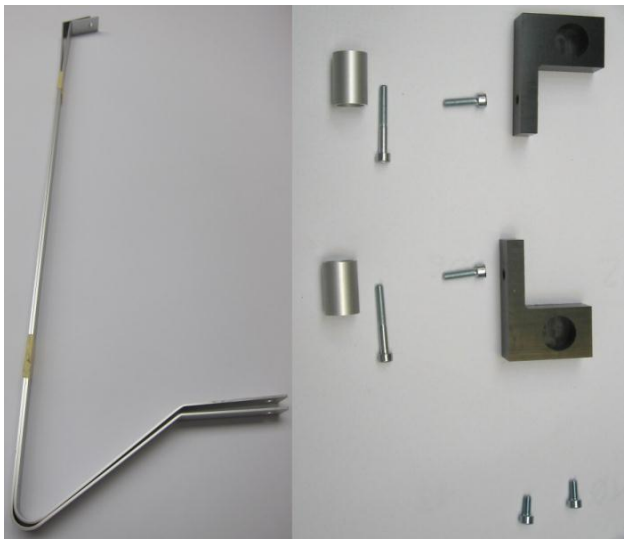
9.9 Add Paper Guide and Paper Tension Parts

9.9.1 Additional Parts

Pos	Amount	Name	Dimension in mm
67	2	Screw M5 x 40	
68	2	Screw M5 x 12	
69	2	Screw M5 x 20	
70	2	Aluminum Tube 20mm	20mm diameter x 30mm length
71	2	Tension Tube Guide	20mm width, 600mm length
01	1	Tube holder, right side	
02	1	Tube holder, left side	
72	1	Aluminum Tube 20mm	20mm diameter x 1950 mm length



9.9.2 Mount Paper Guide Tube Front Printer

First mount the tube holder to the profile. Use the inserted slot nuts and the M5 x 20 screws.

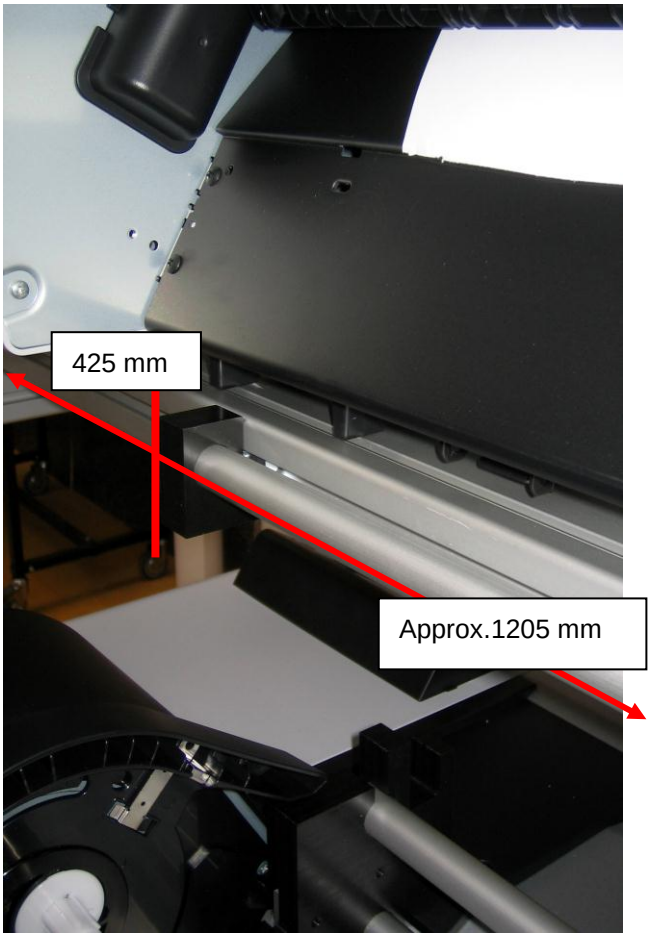
Put the paper guide tube into the holders right and left.

Distance from the “side frame” to the “tube holders”, measured from left side to left side is 425 mm.

Distance from the left “tube holder” to the right “tube holder” is approx. 1205 mm.

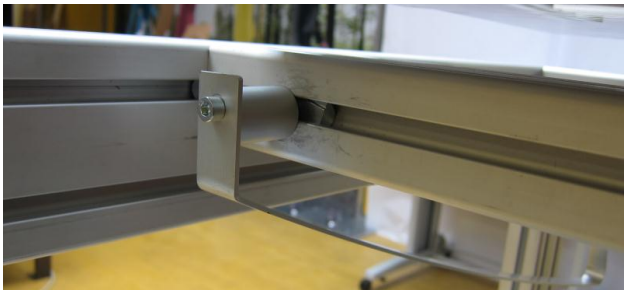
Note:

The tube should rotate freely.



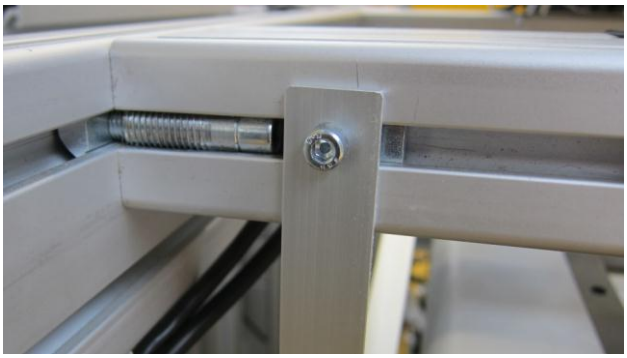
9.9.3 Mount the Paper Tension Guide

Use the M5 x 40 screws with the short aluminum tube to fix the guide to the profile.

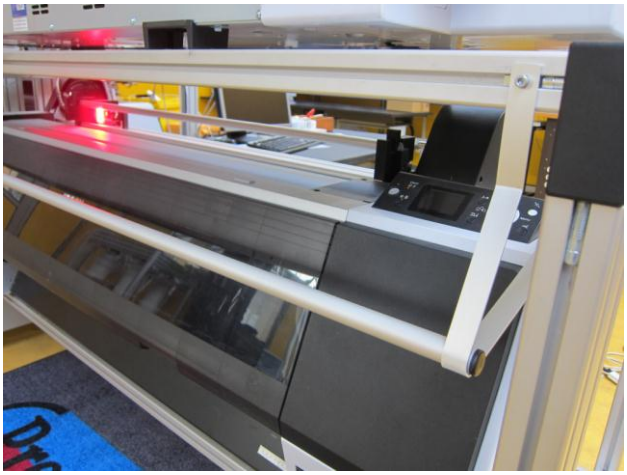


Mount the end of the guide to the slot nut in the second profile. Use the M5 x 10 screws.

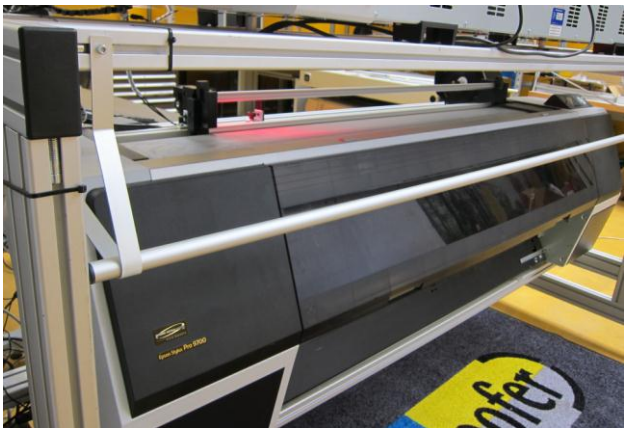
Do the same on the opposite side.



Fully mounted Paper Tension guide.



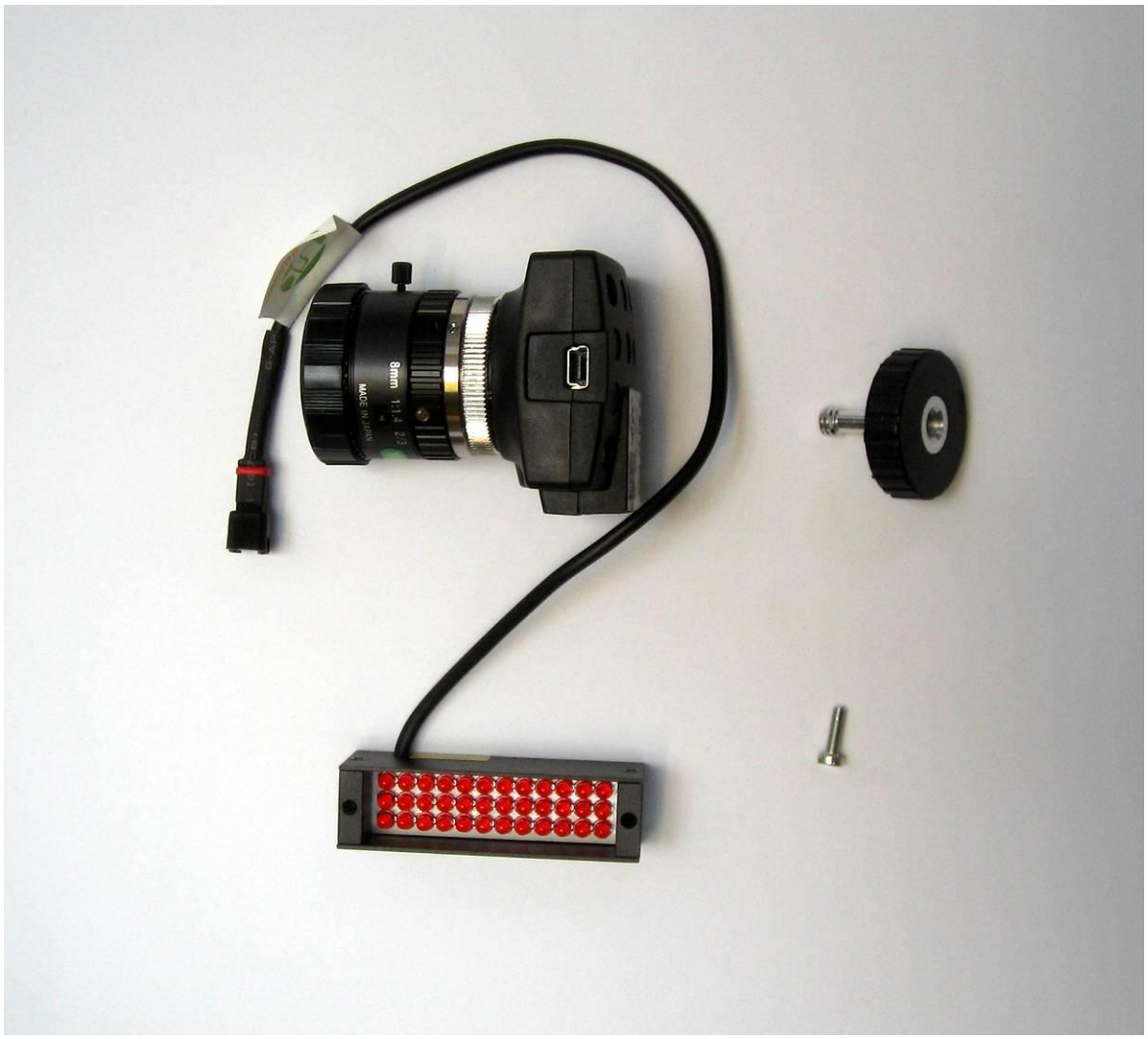
Fully mounted Paper Tension guide.



9.10 Camera and Bar Light on Back Printer

9.10.1 Additional Parts

Pos	Amount	Name	Dimension in mm
71	1	Screw M3 x 10 with M4 washer	
72	1	Screw for Camera	
73	1	Camera	
74	1	Lens	
75	1	Ring distance holder	
76	1	LED Bar Light, red	

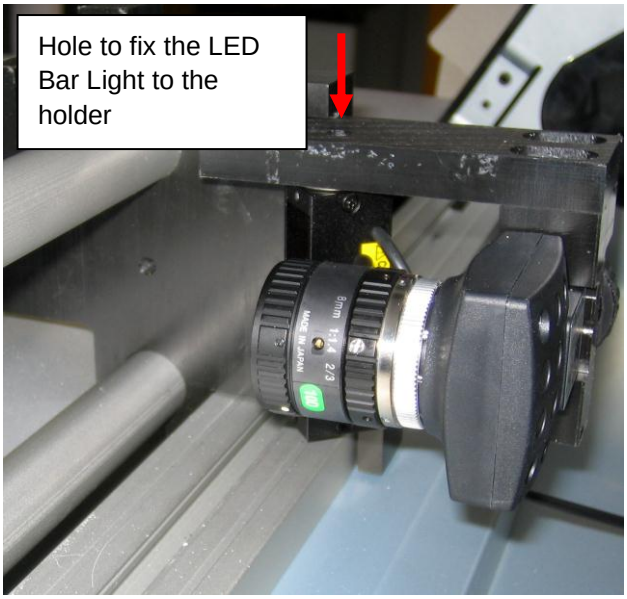

8mm

9.10.2 Mount Camera and LED Bar Light

Mount first the LED Bar Light; use the M3x10 screw to fix it to the holder.

Set the focus on the lens to “Close Up” and the aperture to approx 8.

Mount the camera.



9.11 Camera and Bar Light on Front Printer

9.11.1 Additional Parts

Pos	Amount	Name	Dimension in mm
71	1	Screw M3 x 10 with M3 washer	
72	1	Screw for Camera	
73	1	Camera	
74	1	Lens	
75	1	Ring distance holder	
76	1	LED Bar Light, red	
77	2	Screw M4 x 16	

9.11.2 Mount LED Bar Light to holder

Mount first the LED Bar Light with the M3 x 10 screw to the holder. Place the M4 washer between the LED Bar Light and the holder.

9.11.3 Mount the holder to Front printer

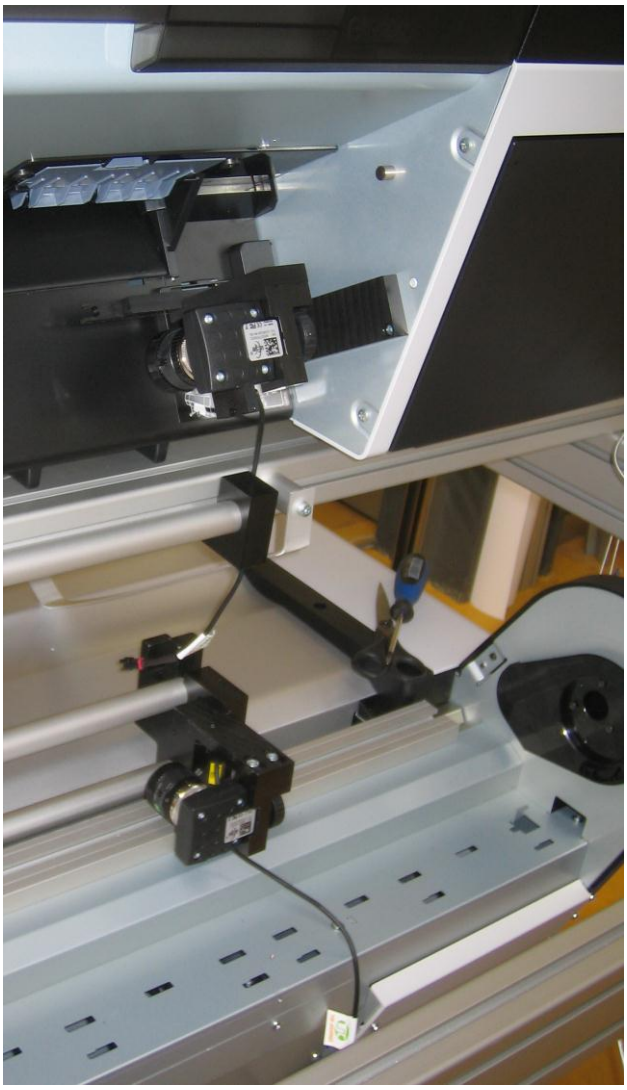
Use the two M4 x 16 screws to mount the holder to the front printer. Use the holes from the spectro scan module on the right hand side.

9.11.4 Mount the Camera

Mount the camera.

Set the focus on the lens to “Close Up” and the aperture to approx. 8.

Mount the camera.

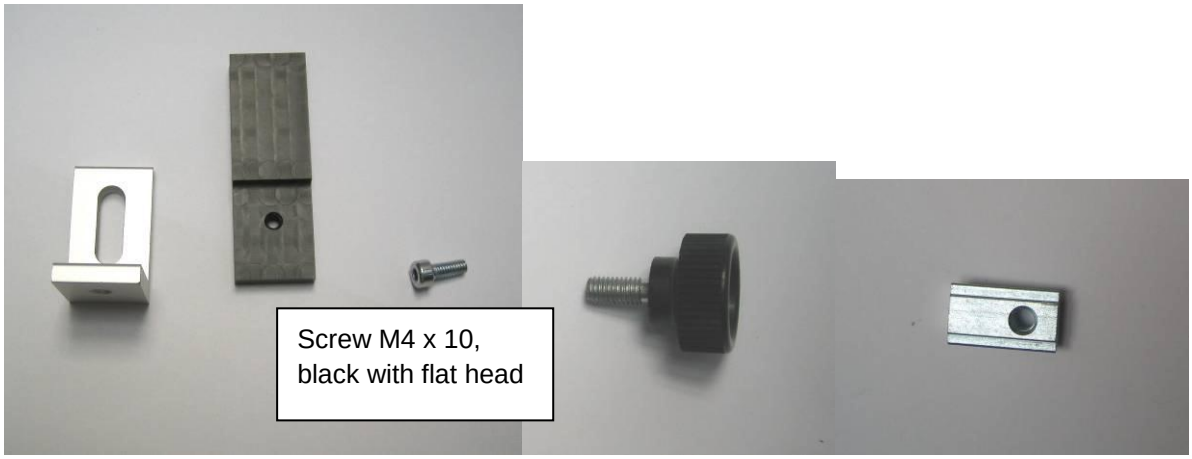


9.12 Paper Bow for Back Printer

9.12.1 Additional Parts

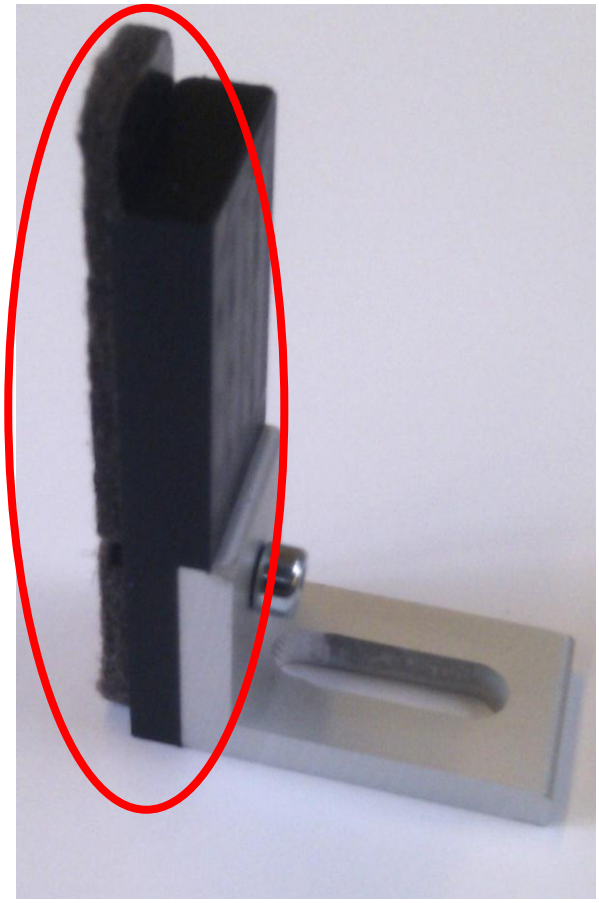
Pos	Amount	Name	Dimension in mm
78	1	Screw M4 x 10	
79	1	Aluminum bracket	
80	1	Washer M4 or similar	

81	1	Screw with big head	
11	1	Distance holder back	
82	1	M5 slot nut, thin type	



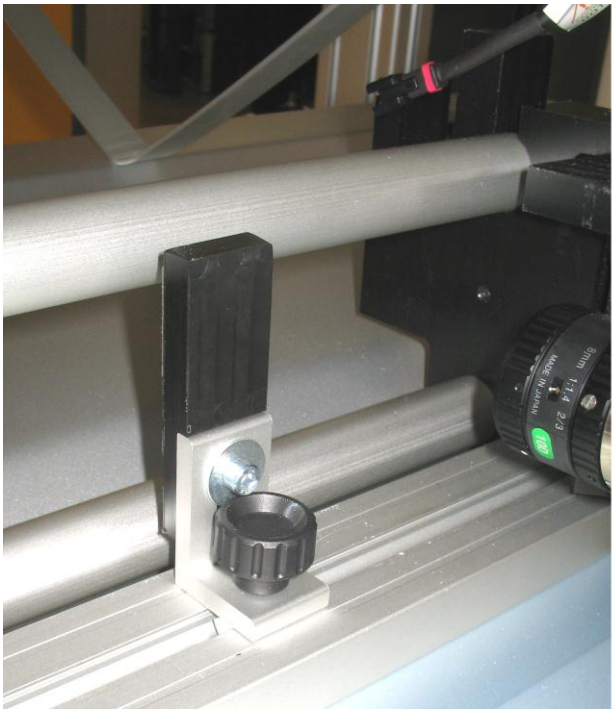
9.12.2 Assembly

Put the screw with the big head through the bracket. Then mount the holder with the M4 screw to the bracket. Mount the felt.



9.12.3 Assembly to the Profile

Insert the slot nut into the profile and screw the distance holder on it.



9.13 Paper Bow for Front Printer

9.13.1 Additional Parts

Pos	Amount	Name	Dimension in mm
83	1	Screw with big head	
13	1	Distance holder front	

Mount the bow to the camera holder on the Front printer.

9.14 Mount the Electronic Box

Mount the box with the Velcro tape to the printer.
Pull the cables through the hole to the PCB board.

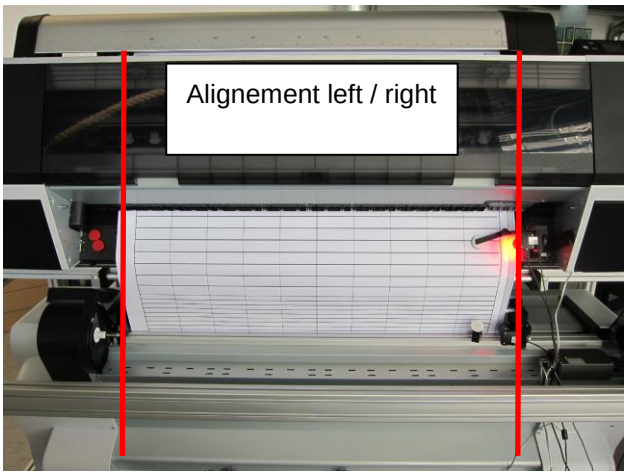
9.15 Align the Printers

9.15.1 Paper Path

To align the two printers for the paper path, print the test job “Job for Printer Alignment FRONT-BACK.PRN”.

Use the “Print File Sender” program to send the job into the Front Printer Queue. The program is located under Start, Program, DI, DI-Pilot, Utilities.

To align the two printers for the paper path, print the test job “Job for Printer Alignment FRONT-BACK.prn”. The print job, a prn file, is located in a programs subfolder called “Testjob”.

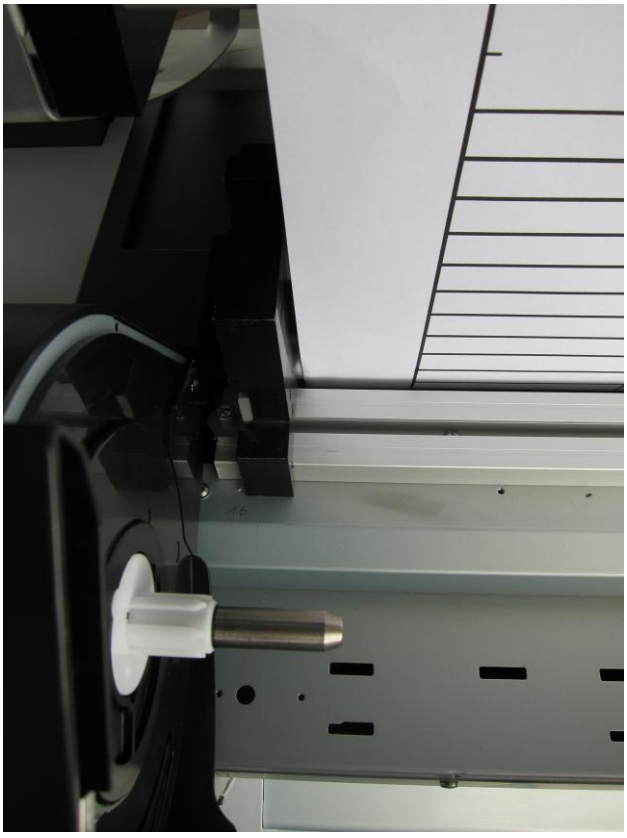


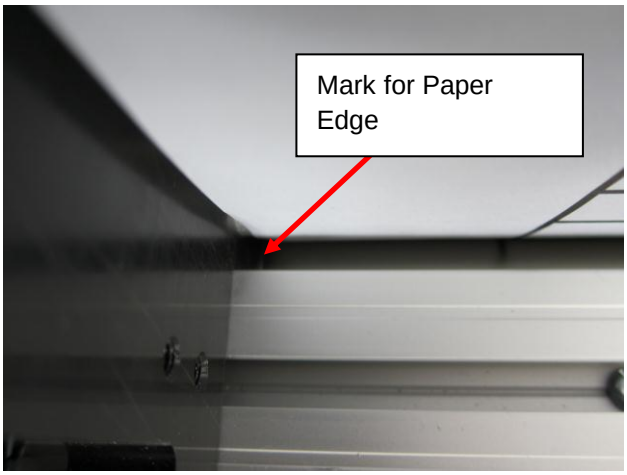
Use the “Print File Sender” program to send the job into the Front Printer Queue. The program is located under Start, Program, DI, DI-Pilot, Utilities.

Feed the paper coming from the Front printer through the Back printer.

Consult the “PaperLoading Guide” for feeding the paper from Top Printer to the Back Printer. PDF is available in the PDF manuals folder.

Check the Paper edge on the left side. It needs to pass the mark on the Back printer a bit to the right side, approx. 1mm.

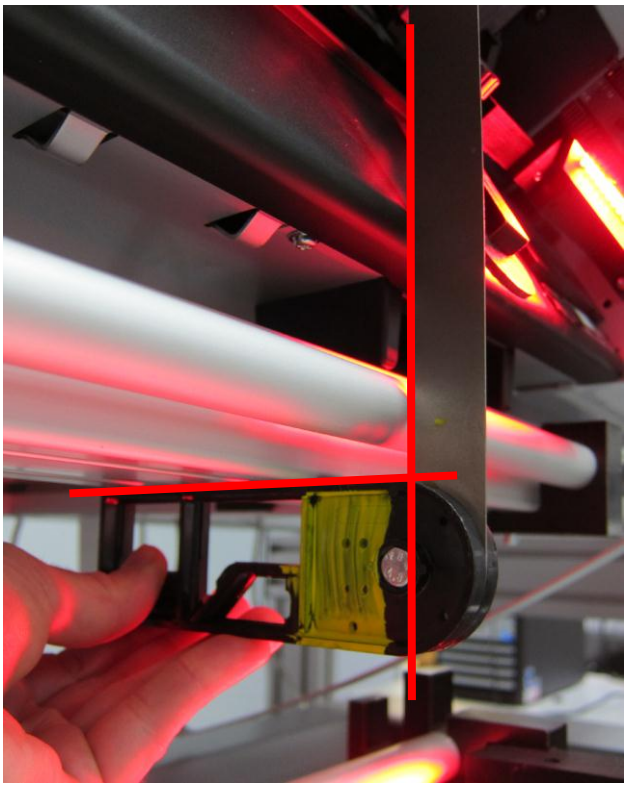




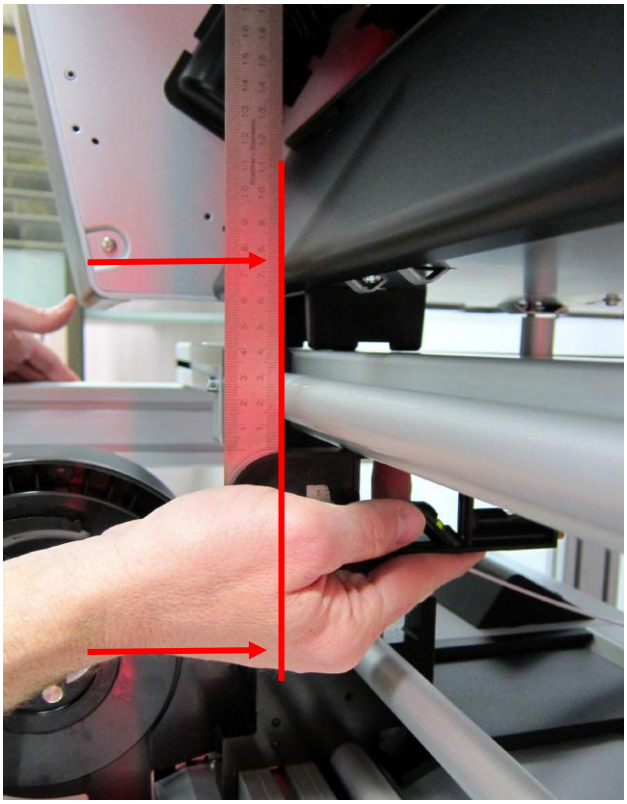
9.15.2 Parallel Alignment Front Printer

To align the printers, use an angle tool like shown.

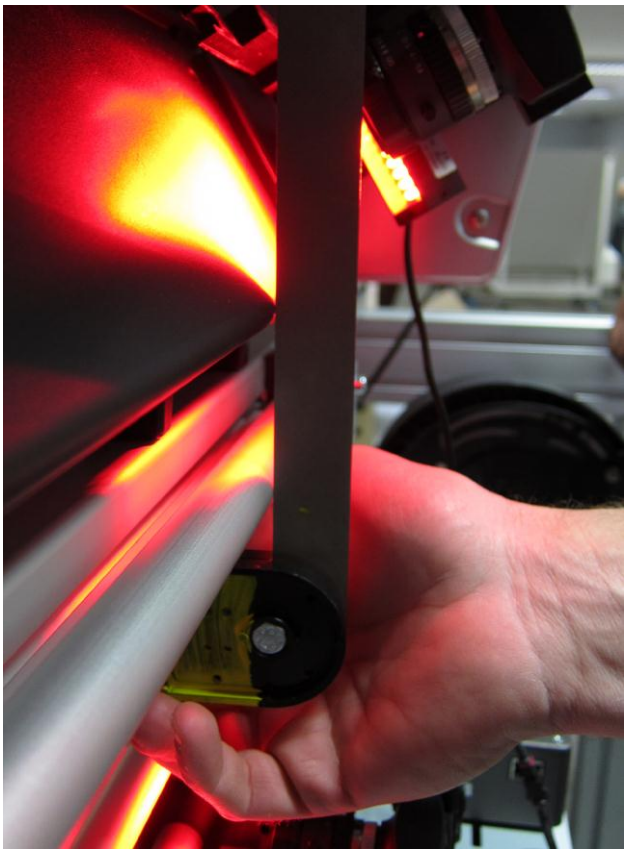
Align the edge from the Front printer with the roller.
The printer edge and the bar are inline.



Line-up on the left side.

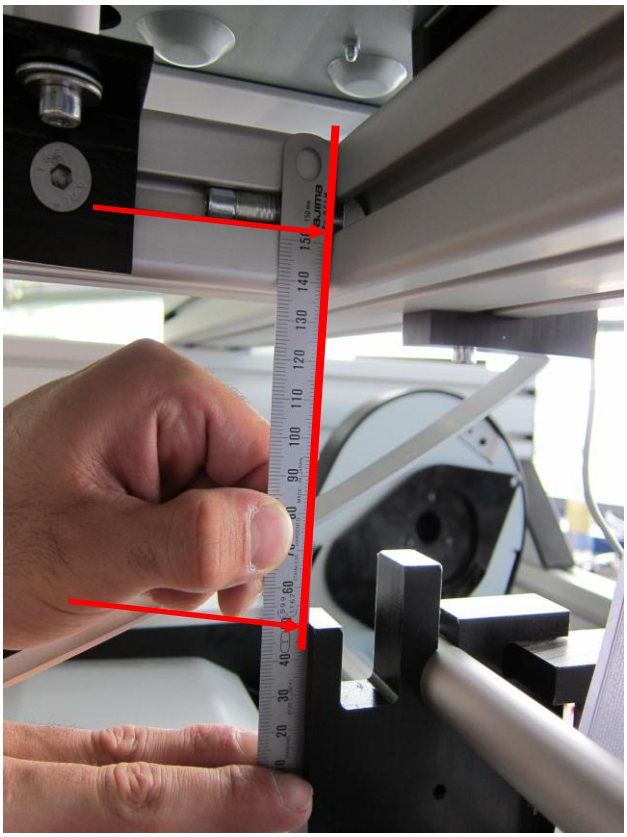


Line-up on the right side.



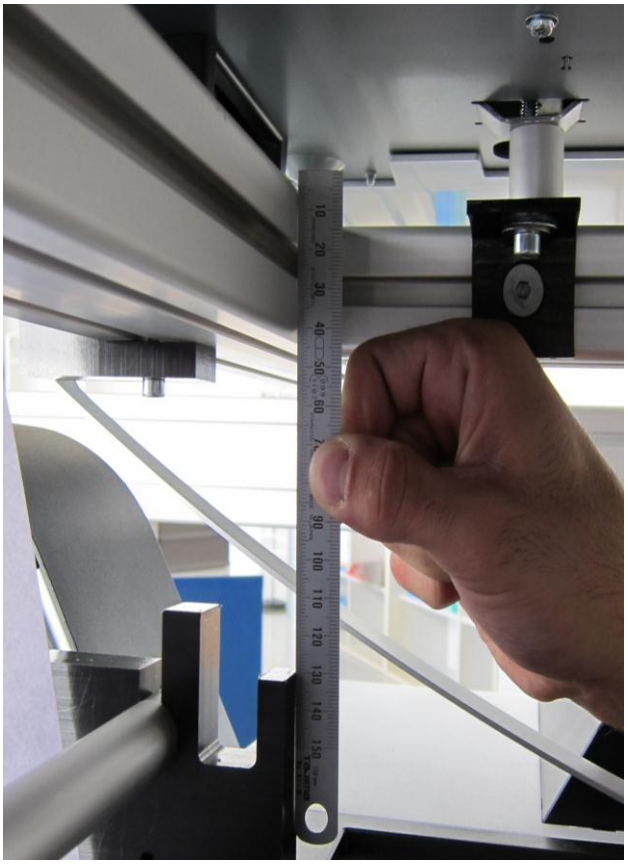
9.15.3 Parallel Alignment Back Printer

Align the lower printer parallel to the frame by checking the edge of the tube holder with the frame.



Frame and tube holder are in line.

Do the same on the other side.



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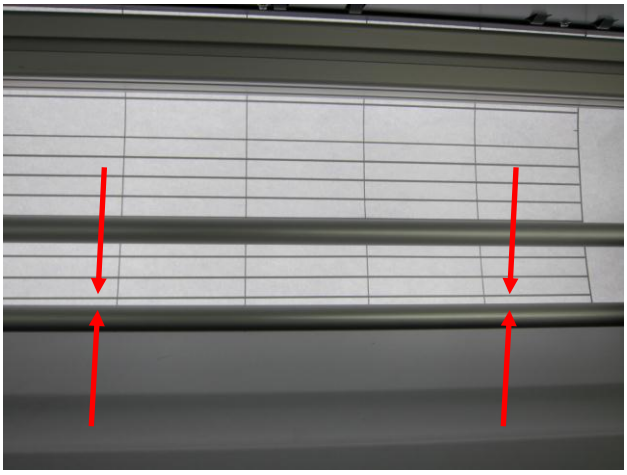
9.15.4 Horizontal Alignment

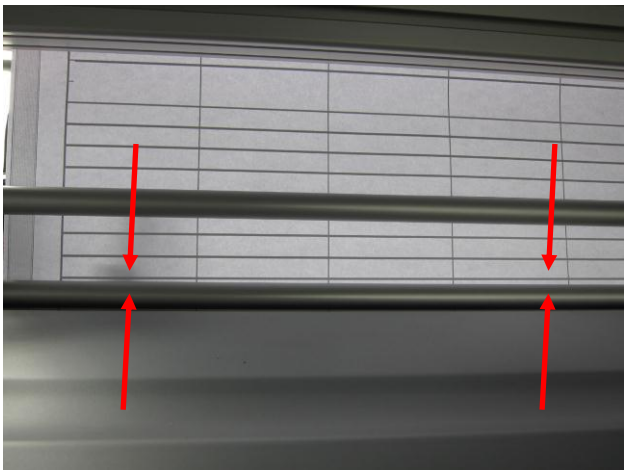
With the test job, it's very simple to check the horizontal alignment.

Pull the paper down

Look at the lines and the tubes. They need to be perfectly parallel, from right to left and…



from left to right!



If corrections are needed, use the delivered 1,5mm aluminum plates to put them below the printer stand. For smaller changes use a washer instead.

10 Printer Panel Configuration

10.1 Parameter Setup TOP and BOTTOM printer

On the printer panel, go into the main “Menu” and select “Printer Setup”.

Open the entry “Roll Paper Margin” and select “DEFAULT”.

Open the entry “Paper Size Check” and select “ON”.

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Open the entry “Paper Skew Check” and select “OFF”.

Open the entry “Refresh Margin” and select “ON”.

Open the entry “Auto Nozzle Check” and select “OFF”.

10.1.1 TOP Printer - Configure Custom Paper 1

On the printer panel, go into the main “Menu” and select “Paper Setup”.

Select “Custom Paper”.

Select “Paper NO.1”.

Select “Paper TYPE”.

Select “Matte Paper”.

Select “Singleweight Matte”.

Stay in the “Paper NO.1” “, open the entry “Platen GAP” and select “WIDER”.

Stay in the “Paper NO.1” “, open the entry “Paper Feed Adjust” and select “+0.0%”.

Stay in the “Paper NO.1” “, open the entry “Drying Time” and select “0.0sec”.

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Stay in the “Paper NO.1” “, open the entry “Paper Suction” and select “-3”.

Stay in the “Paper NO.1” “, open the entry “Set Roll Paper Tension” and select “Extra High”.

Stay in the “Paper NO.1” “, open the entry “Remove Skew” and select “OFF”.

Activate “Custom Paper NO.1” and select “Roll Paper – No Cut”.

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10.1.2 Bottom Printer- Configure Custom Paper 1

On the printer panel, go into the Menu and select “Paper Setup”.

Select “Custom Paper

Select “Paper NO.1”.

Select “Paper TYPE”.

Select “Matte Paper”.

Select “Singleweight Matte”.

Stay in the “Paper NO.1” “, open the entry “Platen GAP” and select “WIDER”.

Stay in the “Paper NO.1” “, open the entry “Paper Feed Adjust” and select “0.0%”.

Stay in the “Paper NO.1” “, open the entry “Drying Time” and select “0.0sec”.

Stay in the “Paper NO.1” “, open the entry “Paper Suction” and select “-1”.

Stay in the “Paper NO.1” “, open the entry “Set Roll Paper Tension” and select “Extra High”.

Stay in the “Paper NO.1” “, open the entry “Remove Skew” and select “OFF”.

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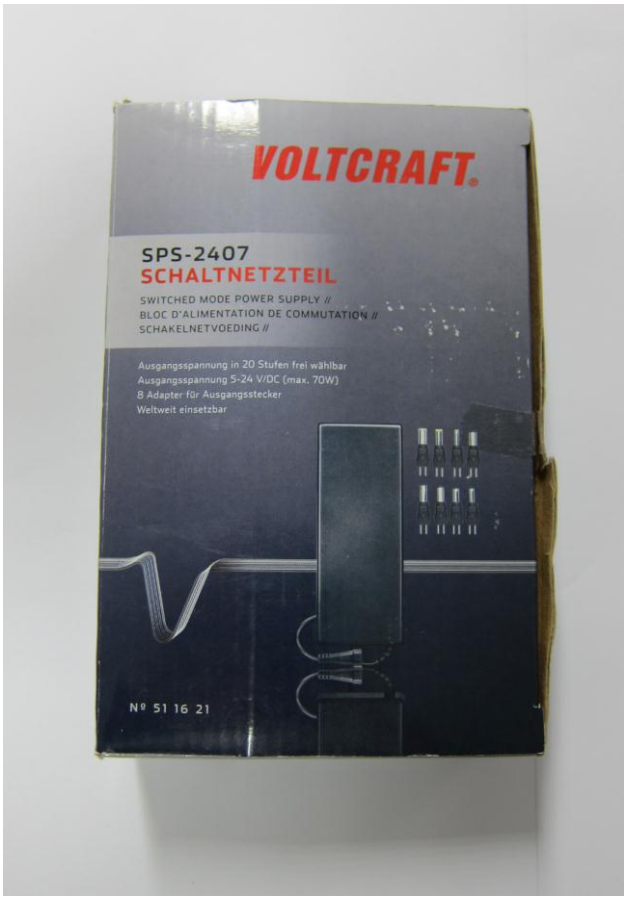
Activate “Custom Paper NO.1” and select “Roll Paper – No Cut”.

11 LED Bar Light

11.1 Power Supply Setup for LED Bar Light

Setup the power supply for the LED bar light:

- Voltage 12V



Setup the connector like shown.

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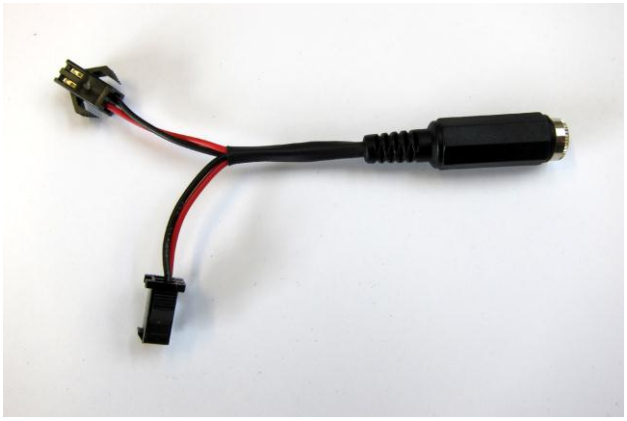
Use the Y-Cable to connect both LED bars.



12 Setup Electronic Box – HW Revision 2 – Nov 2011

12.1 HW Changes

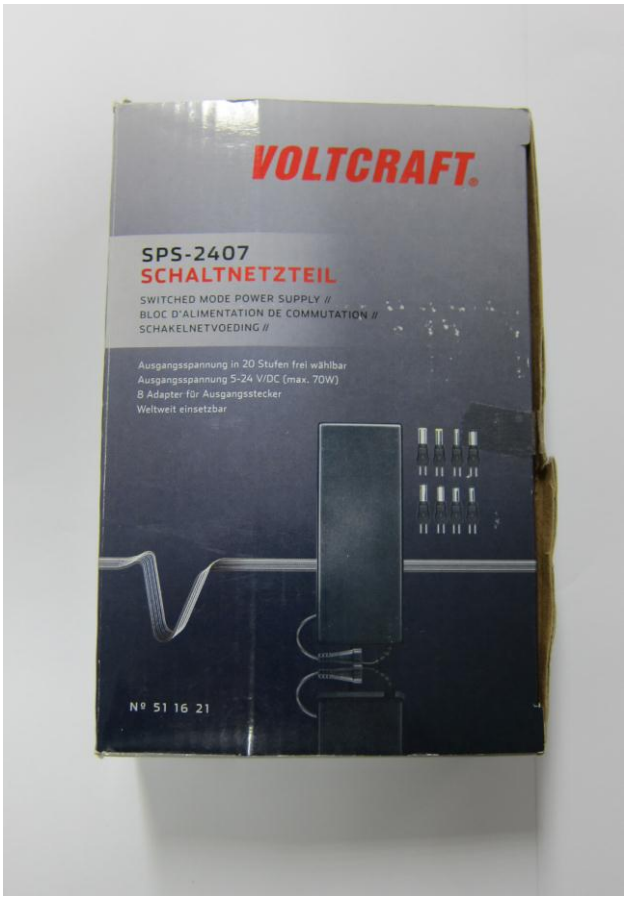
In November 2011, a new designed Electronic box for the Preproofer has been released. The new box is recognized by the three RJ11 connectors on the opposite side of the power connector.

Beside internal hardware changes, the electronic allows to control the cutter system on the Epson printer through the cut motor encoder. Therefore it's no longer necessary to setup the two parameters "Cut Left" and "Cut Right".

12.2 Power Supply Setup for Electronic Box

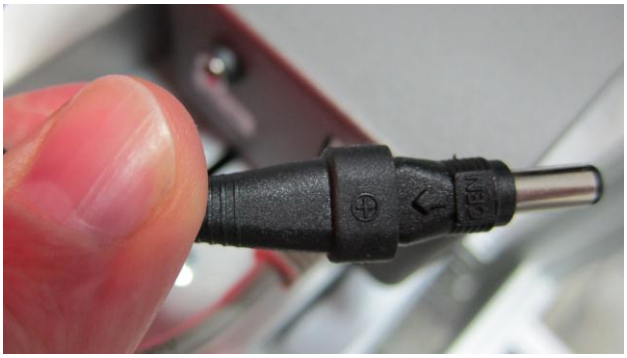
Setup the power supply for the electronic box:

- Voltage 24V



When upgrading a Preproofer system which was installed with the previous Electronic Box version, leave the voltage on the power supply on 23V.

Setup the connector like shown.



12.3 Setup the Lantronix Device

To connect from the computer to the Electronic Box, you need to install and configure the Lantronix Device (built in Ethernet to Serial converter).

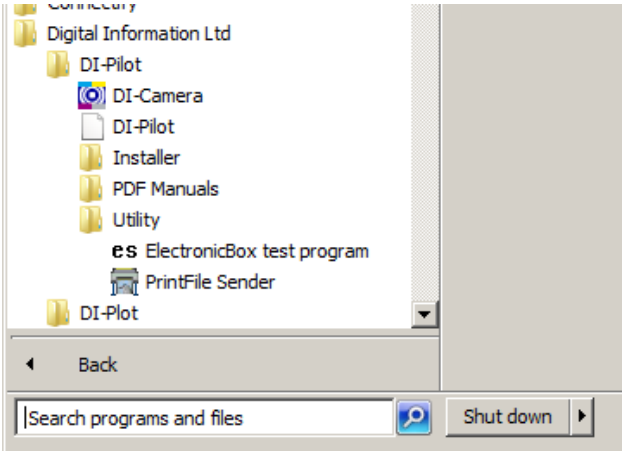
See the document “Quick Start SW for Preproofer LONGSTREET x700 x900 english.pdf”, chapter “Install the software for the Electronic box”

12.4 Run the Test Program

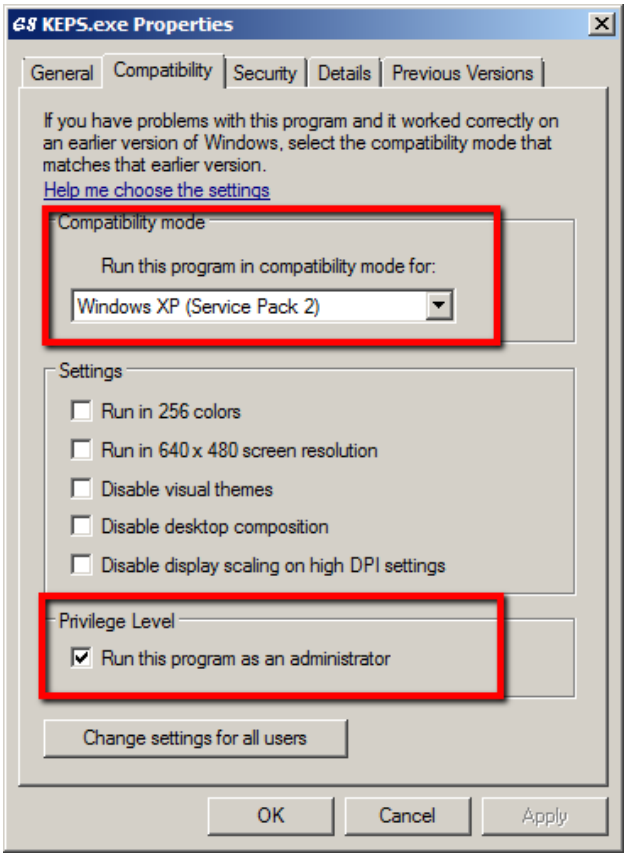
Install the DI-Pilot software which is available on the delivered Preproofer CD.

The latest installer is always available on the web site www.digiinfo.com

Run the program „ElectronicBox test program” which is found under Start, Programs, Digital Information Ltd, DI-Pilot, Utility

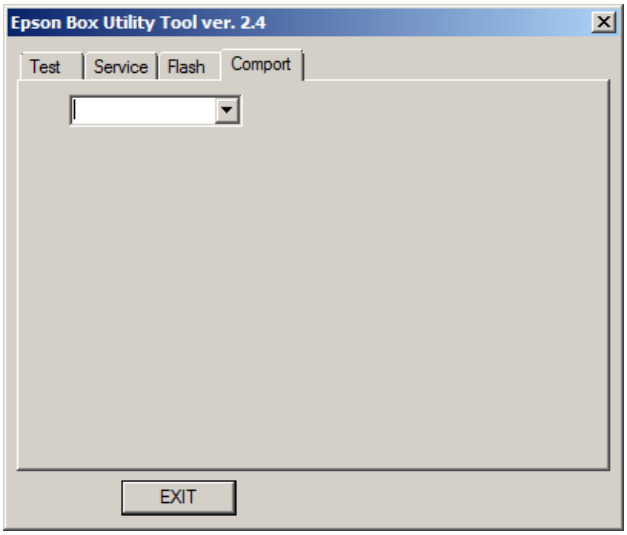


Set first the compatibility mode to “Windows XP SP2” and set the privilege level to “Run this program as an administrator”.


KEPS.exe Properties
General
Compatibility
Security
Details
Previous Versions
If you have problems with this program and it worked correctly on an earlier version of Windows, select the compatibility mode that matches that earlier version.
Help me choose the settings
Compatibility mode
Run this program in compatibility mode for:
Windows XP (Service Pack 2)
Settings
Run in 256 colors
Run in 640 x 480 screen resolution
Disable visual themes
Disable desktop composition
Disable display scaling on high DPI settings
Privilege Level
Run this program as an administrator
Change settings for all users
OK
Cancel
Apply

PP x700/x900 v1.7

Start the utility software and select in the tab Comport the serial COM port which has been set with the Lantronix setup tool before.

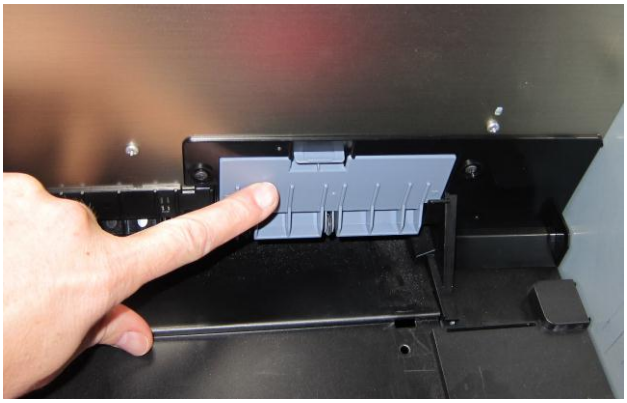


12.5 Calibrate the CUT Motor Parameter

12.5.1 Calibration – Step by Step

Step 1

Remove the cutter service cover.



Step 2

On the printer panel, change to the menu “Maintenance” and press ENTER.

Step 3

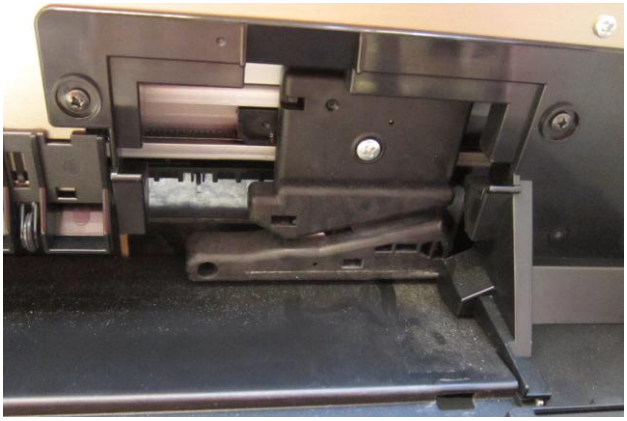
Change to the menu “Cutter Replacement” and press ENTER.

Step 4

The menu entry “Execute” comes up. Press ENTER.

Step 5

The cutter moves to the service position.



PP x700/x900 v1.7

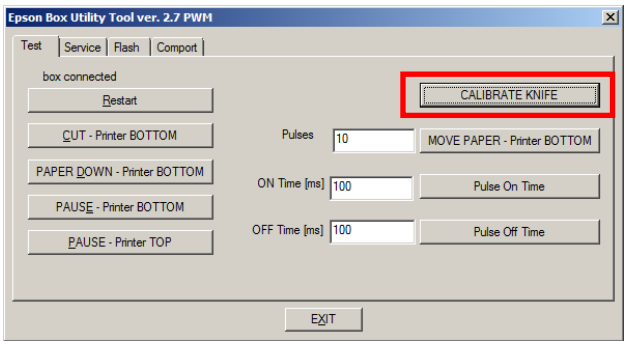
Step 6

Move the cutter manually to the left hand side.

Step 7

Change to the tab “Test”. Press the button “Calibrate knife”.

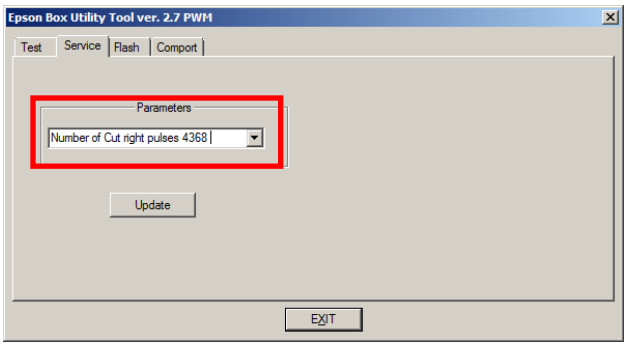
The cutter travels back to the home position. When the home position is reached, the Electronic Box has calibrated itself with the printer.



Step 8

Change to the tab “Service” and verify the cut parameter “Number of Cut right pulses”.

The value is the result of the calibration process from step 7.



9x00 Printer:

The value should be around 4360.

7x00 Printer:

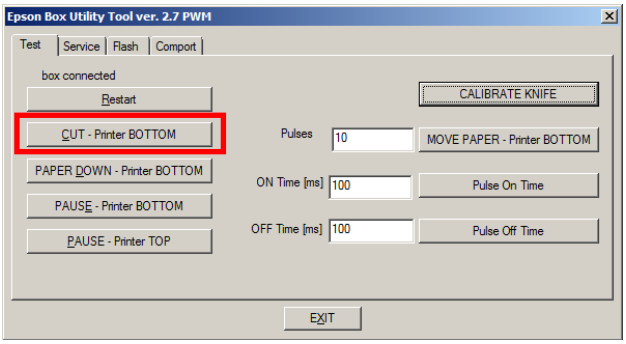
The value should be around 2200.

Step 8

Test the cutter:

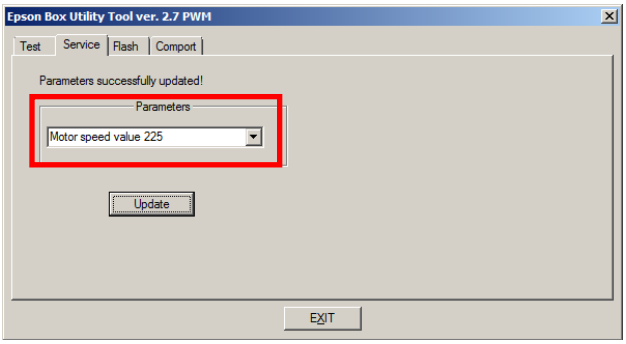
Change to the tab “Test”. Press the button “CUT – Printer BOTTOM”.

The Epson printer runs a cut process.



12.5.2 Setup Motor Speed

Change to the tab “Service” and open parameter “Motor speed value”.



9x00 Printer:

Set the parameter to 225.

7x00 Printer:

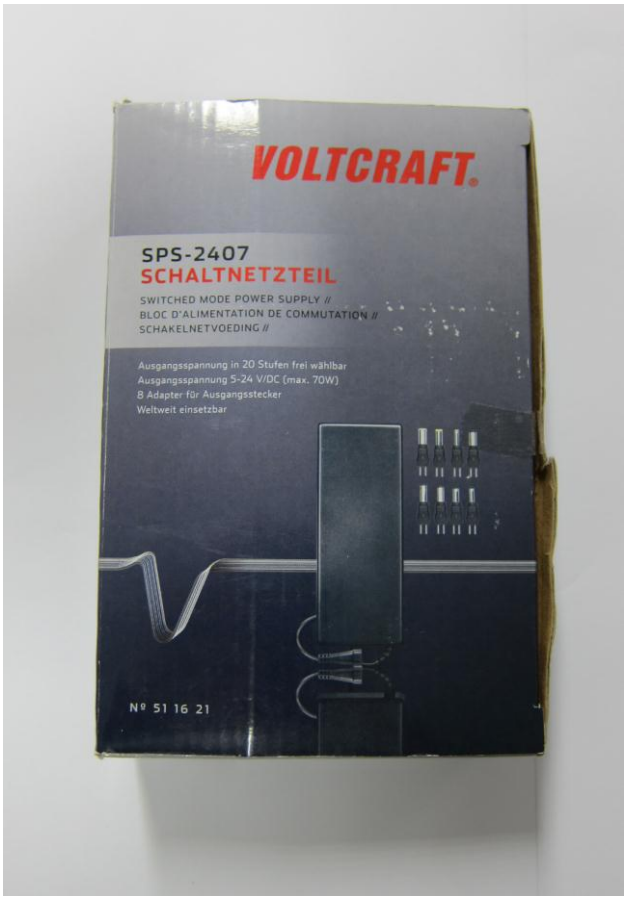
Set the parameter to 225.

13 Setup Electronic Box – HW Revision 1 – OLD STYLE

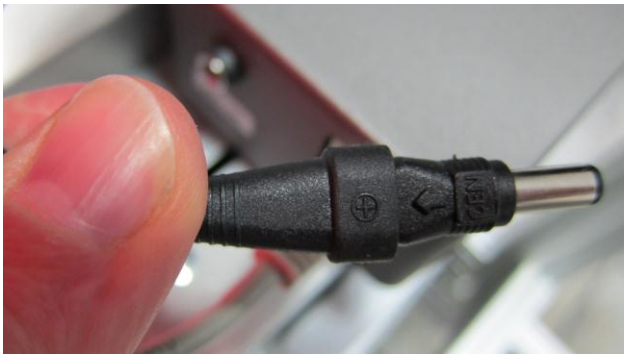
13.1 Power Supply Setup for Electronic Box

Setup the power supply for the electronic box:

- Voltage 23V



Setup the connector like shown.



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13.2 Setup the Lantronix Device

To connect from the computer to the Electronic Box, you need to install and configure the Lantronix Device (built in Ethernet to Serial converter).

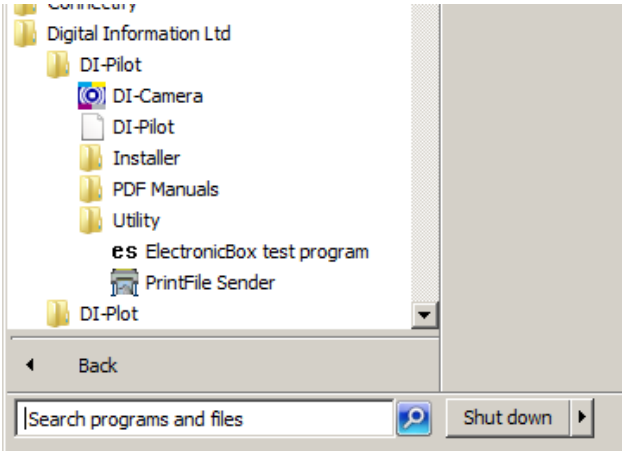
See the document “Quick Start SW for Preproofer LONGSTREET x700 x900 english.pdf”, chapter “Install the software for the Electronic box”

13.3 Run the Test Program

Install the DI-Pilot software which is available on the delivered Preproofer CD.

The latest installer is always available on the web site www.digiinfo.com

Run the program „ElectronicBox test program” which is found under Start, Programs, Digital Information Ltd, DI-Pilot, Utility



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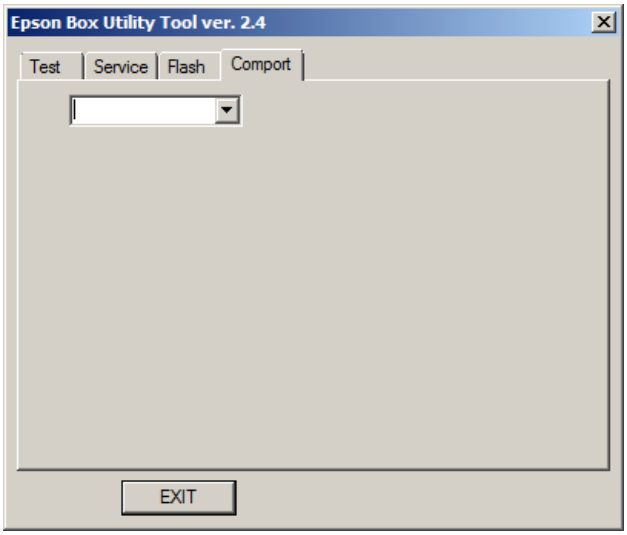
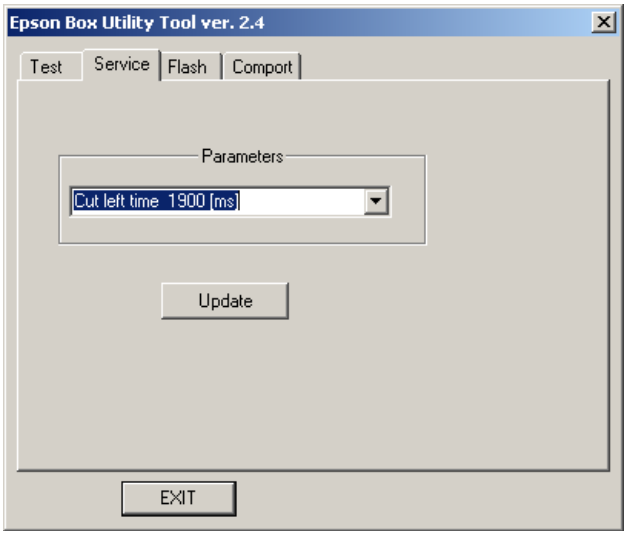
Select the COM port here. The COM port is redirected to the IP address of the Lantronix device.



13.4 Setup the CUT parameters

Select the Service tab and set the parameter “Cut left time” to:

- for Printer Model 9x00 :2200
- for Printer Model 7x00 :1100



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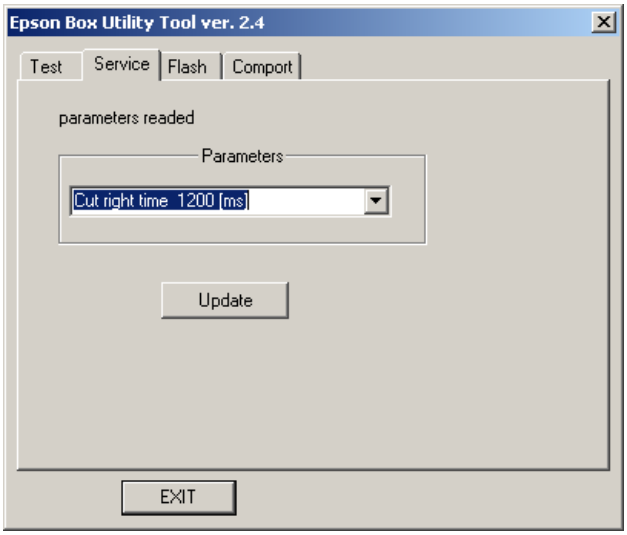
Select the parameter “Cut right time” to:

- for Printer Model 9x00 :1200
- for Printer Model 7x00 :595

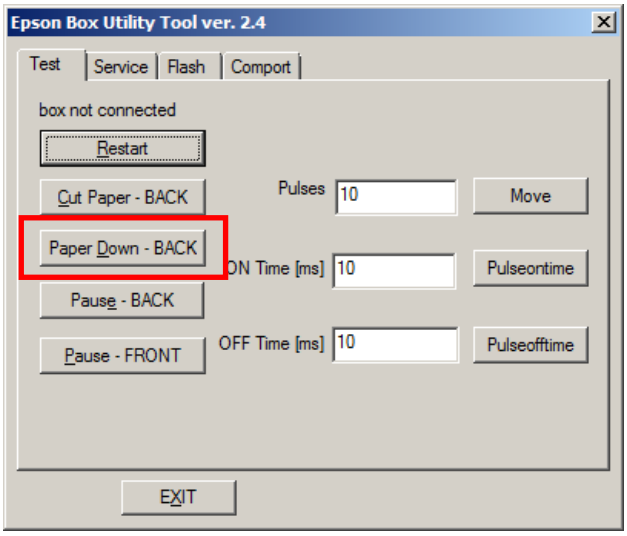


14 Test Printer Panel Cable Connection

14.1 Test „Paper Down BACK“

Test the button:

- “Paper Down BACK”



Simulate like:

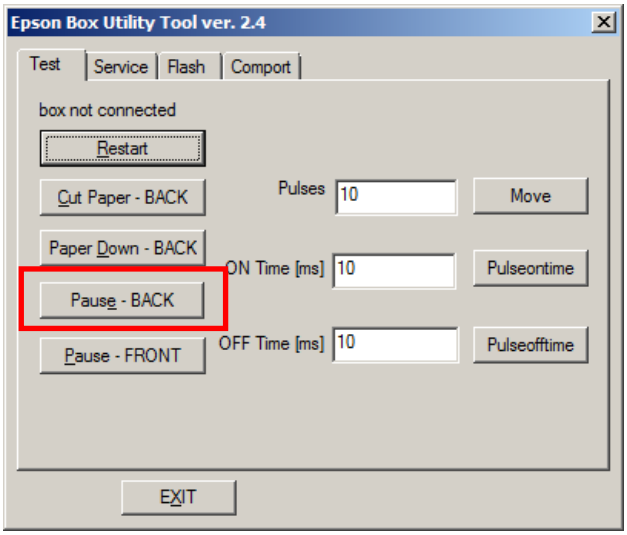
At the Bottom printer enter at the panel the “Menu”. Now press “Paper Down BACK” on the software GUI. Check the panel again; the next entry below is selected.

The UI may vary from version to version.

14.2 Test „Pause BACK“

Test the button:

- “Pause BACK”



Simulate like:

At the Bottom printer the status of the printer toggles between “Ready” and “Pause”. Check it on the panel.

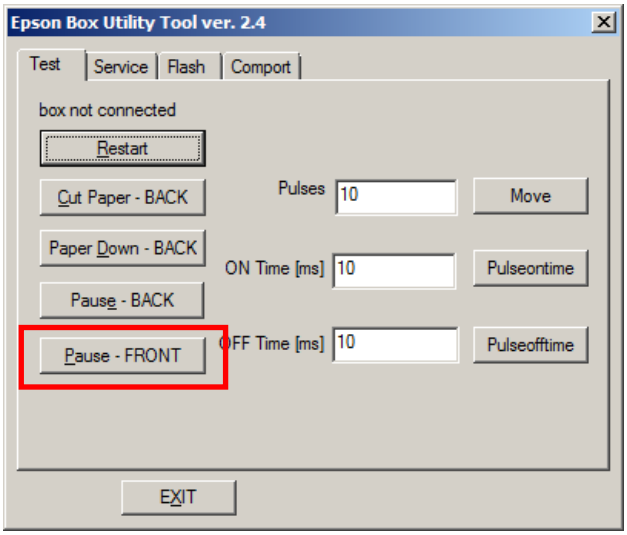
14.3 Test „Pause FRONT“

Test the button:

- “Pause FRONT”

Simulate like:

At the TOP printer the status of the printer toggles between “Ready” and “Pause”. Check it on the panel.



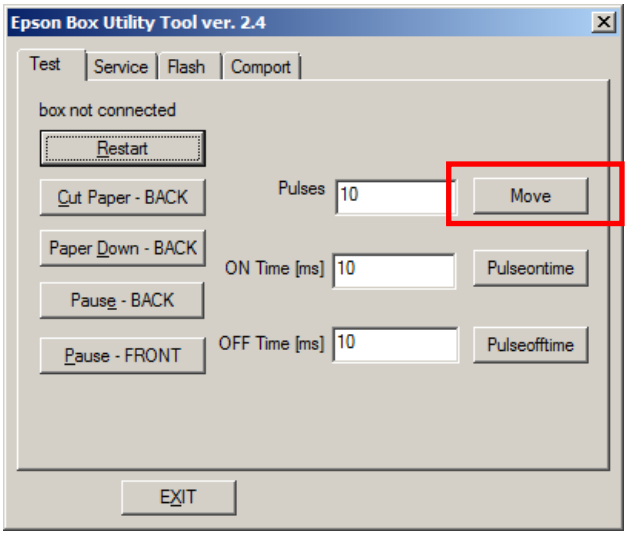
14.4 Test Paper MOVE

Test the button:

- “Move”

Simulate like:

The Back Printer should be loaded with paper. When pressing the MOVE button, the paper moves down.



15 Calibrate Paper Movement Printer Back

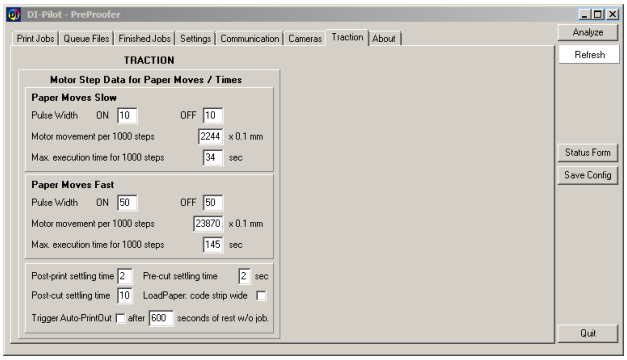
15.1 Background

The ElectronicBox is connected to the Epson paper feed motor. With the precise paper movement, a superb front and back registration is guaranteed.

Calibrate the DI-Pilot software motor parameter with the following procedure.

15.2 Paper Traction Calibration

1) Start DI-Pilot and verify to base settings in the tab Traction:



Epson 9x00 with Electronic Box HW Rev 2 – shipped after Nov 2011

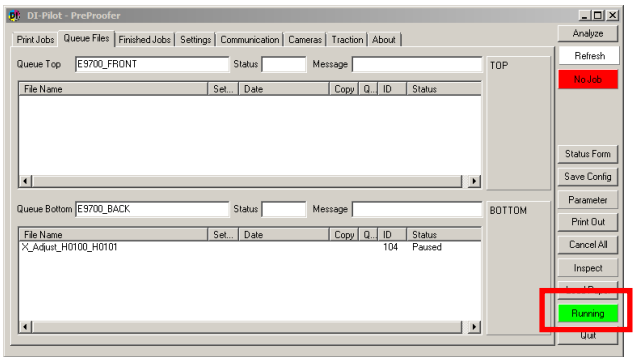
	Paper Move Slow	Paper Move Fast
Puls Width ON/OFF	10 / 10	50 / 50
Motor movement per ….	2000	23500
Max execution time for....	25	120

Epson 9x00 with Electronic Box HW Rev 1 – shipped till October 2011

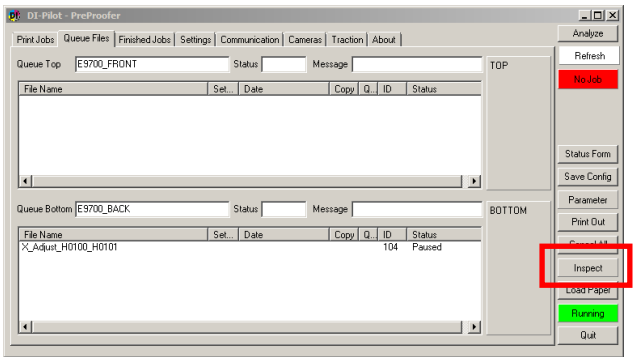
	Paper Move Slow	Paper Move Fast
Puls Width ON/OFF	8 / 8	50 / 50
Motor movement per ….	850 (7x00 = 1430)	11000 (24”printer = 21500)
Max execution time for....	27 (7x00 = 20)	120 (24”printer = 145)

2) Run the PaperLoad process to get the paper correctly loaded between the two printers (see the instruction “HowTo - Paper Load x700 English.pdf”).

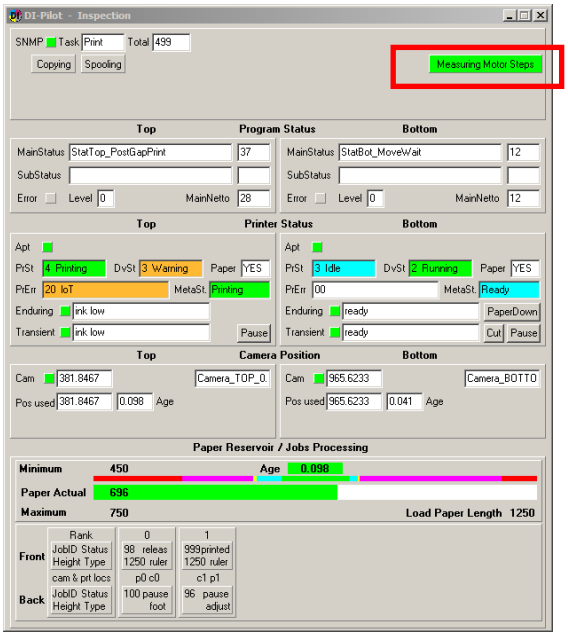
3) Press the Start button to get DI-Pilot running.



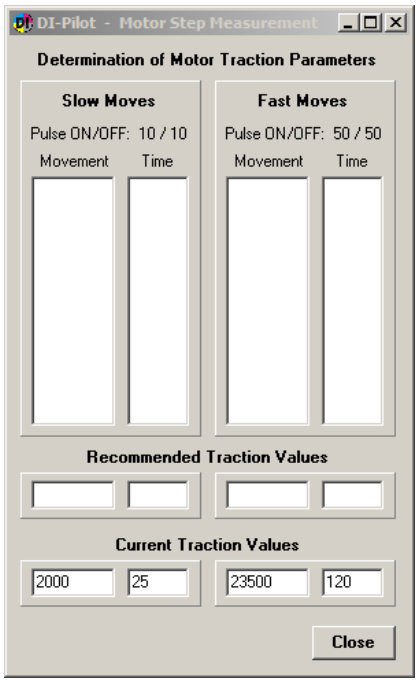
4) Press the Inspect button.



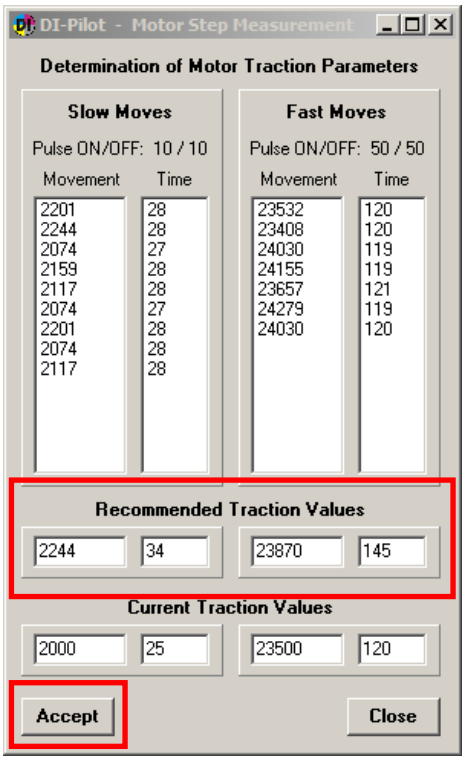
5) Press the MeasuringMotorSteps button.



6) The DI-Pilot starts the motor test routine.



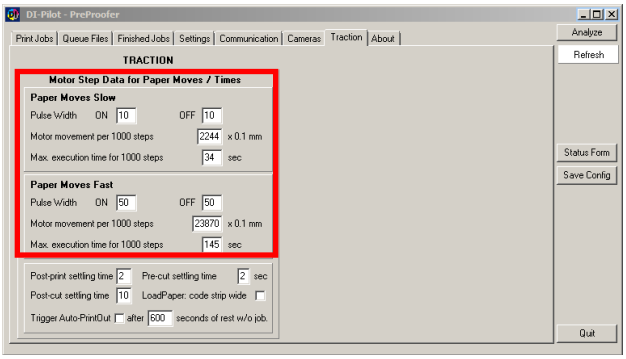
7) After several measurements, the button Accept comes up. Press Accept to store the new traction values.



8) Close and restart the software.

PP x700/x900 v1.7

9) Verify the new settings in the tab Traction



10) Finish!